

# AMERICAN GAS ASSOCIATION MONTHLY

International Goodwill Prevails at Chicago

The Gas Industry  
In America

ARTHUR HEWITT

The Association's  
Job

ALEXANDER FORWARD

A New Concept  
In Utility Regulation

H. LESTER HOOKER

Gas Industry Plans  
For Greater Sales

CONRAD N. LAUER

Gas Headed Toward Greater Service  
Throughout World

FRANK P. TARRATT



October, 1933

# Modern Kitchens—

## A Handbook for Design and Construction

THIS Copyright Edition offers a volume that is indispensable to Gas Companies and especially helpful to Home Service Departments. A glance at the Contents will convince you that you cannot afford to be without this volume of comprehensive information for the best in kitchen styling.

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Planning Principles  
Theories of Kitchen Planning

#### GAS EQUIPMENT

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Gas Refrigerator  
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Other Gas Equipment Allied to Kitchen Planning

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Working Counters  
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Suggested Forms for Estimate and Other Information

#### KITCHEN MEASUREMENTS (Vital Statistics)

#### SUGGESTED FORM FOR INFORMATION SHEETS

#### SUGGESTIONS FOR RECORDING DIMENSIONS

#### GLOSSARY

Price \$3.00 (TO MEMBER COMPANIES)

Address, Secretary

National Directing Committee of Executives

AMERICAN GAS ASSOCIATION

420 LEXINGTON AVENUE

NEW YORK, N. Y.

# AMERICAN GAS ASSOCIATION MONTHLY

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## Herbert O. Caster Elected President Of Association

**H**ERBERT O. CASTER, of New York, was elected president of the American Gas Association at the Chicago Convention, last month. Judge Caster's interest in the gas industry dates back to 1915 when he was Attorney for the Kansas Public Service Commission. Leaving the Commission three years later he resumed the practice of law at Topeka. In 1919, he joined Henry L. Doherty & Company as general counsel for the Empire Gas & Fuel Company, Bartlesville, Oklahoma, where he remained until 1925 when he was transferred to the general office of Doherty & Company and became a member of the Executive Committee.

# AMERICAN GAS ASSOCIATION MONTHLY

Allyn B. Tunis, Editor

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## International Goodwill Prevails at Chicago

**H**ISTORY of the industry will not overlook the International Gas Conference and Fifteenth Annual Convention of the American Gas Association, which came to a close September 29 after a five-day session at the Hotel Stevens, Chicago, Ill. It was attended by nearly 3,000 delegates.

Tuesday, September 26, was observed at the Century of Progress Exposition as International Gas Day, and this gave added color to the first general session, when President Arthur Hewitt introduced a group of distinguished gas executives from abroad. The overseas visitors were welcomed to Chicago by Rufus C. Dawes, president of the exposition, and Mayor E. J. Kelly, of Chicago.

Responses and addresses were made by F. P. Tarratt, president of the Institution of Gas Engineers, Newcastle-upon-Tyne, England; A. Baril, vice-president of the International Gas Union and former president of the French Technical Gas Association, Paris, and Fritz Escher, president of the International Gas Union, Zurich, Switzerland.

With the air of international goodwill continuing into all general and sectional meetings, the Convention began work in earnest at the second general session. Annual reports were submitted and officers elected.

At this session, E. M. Tharp, vice-president of the Ohio Fuel Gas Company, Columbus, delivered an address on "Executive Responsibility for Sales Promotion." As chairman of the National Directing Committee of Executives, Conrad N. Lauer, president of The Philadelphia Gas

Works Company, spoke on "Industry Planning for Greater Sales."

At the closing general session the delegates voted to hold the 1934 A.G.A. Convention at Atlantic City, N. J., during the week of October 29. H. D. Hancock, Henry L. Doherty & Company, New York, N. Y., reported as chairman of the rate structure committee. The progress of the manufactured and natural gas industry in technical and merchandising research was reviewed by F. C. Weber, vice-president, The Brooklyn Union Gas Company, Brooklyn, N. Y.

H. Lester Hooker, of Richmond, a member of the Virginia State Corporation Commission and president of National Association of Railroad and Utilities Commissioners, pleaded for speedier determination of rate cases and criticized public service commissions for not interpreting their findings to the public in language the average business man can understand. Dr. Harvey N. Davis, president of Stevens Institute of Technology, Hoboken, N. J., closed the meeting with an inspirational address, "What's Our Job?"

The Natural Gas Department held its annual meeting September 25. Instead of the single session common at past A.G.A. Conventions, natural

### New Officers

President—H. O. Caster, Member Executive Committee, Henry L. Doherty & Co., New York, N. Y.

Vice-President—P. S. Young, Vice-President, Public Service Electric & Gas Co., Newark, N. J.

Treasurer—William J. Welsh, President, New York and Richmond Gas Co., Staten Island, N. Y.

Directors—Two-Year Terms:

H. C. Abell, New Orleans, La.; Walter C. Beckjord, Vice-President and General Manager, Boston Consolidated Gas Co., Boston, Mass.; Howard Bruce, Chairman of the Board, Bartlett Hayward Co., Baltimore, Md.; J. S. DeHart, Jr., President, Isbell-Porter Co., Newark, N. J.; F. C. Freeman, President, Providence Gas Co., Providence, R. I.; R. W. Gallagher, President, The East Ohio Gas Co., Cleveland, Ohio; C. N. Lauer, President, Philadelphia Gas Works Co., Philadelphia, Pa.; B. J. Mullaney, Vice-President, Peoples Gas Light & Coke Co., Chicago, Ill.; Herman Russel, President, Rochester Gas & Electric Corp., Rochester, N. Y.



P. S. Young, vice-president of the Public Service Electric & Gas Co., who was elected Vice-President of the Association

gas sessions were held both morning and afternoon.

The first session with Chairman G. W. Ratcliffe, Manufacturers Light & Heat Company, Pittsburgh, Pa., in the chair was devoted to committee reports and an address by Paul S. Clapp, Columbia Gas and Electric

Corporation, New York, N. Y., on "Taxation as It Relates to Utility Companies."

The second Natural Gas Department session was given over to a selected group of addresses covering important features of various utility problems including legal affairs peculiar to production and transportation, rate schedules for load building, selling the value of natural gas, gas plants as standby for transmission lines, natural gas as a competitive fuel, and the relation between gas reserves developed and undeveloped and market requirements.

The Accounting Section held two sessions this year. The first session started with the chairman's opening remarks by J. M. Roberts, The Peoples Gas Light & Coke Company, Chicago, and was followed by a presentation of the Customers' Relations Committee covering the subjects of improving customers' relations through bill investigations and information on customers' orders. The "Presentation of Natural Gas Representatives Committee" was made by F. B. Flahive, Columbia Gas & Electric Corporation, New York, N. Y. Thomas Carmichael, engineer and general manager, Portsmouth Gas Company, Portsmouth, England, concluded the first session with an address on "Meter Reading and Col-



William J. Welsh, president of the New York and Richmond Gas Co., Staten Island, N. Y., who was elected Treasurer of the Association

lecting of Accounts," in which he described the methods adopted by his company in obtaining the best results by the most economical means.

The final session of the Accounting Section was given over largely to reports of the various committees including the Customers' Accounting Committee, Accounting Machines Committee, Office Management Committee, Uniform Classification of Accounts Committee, and Affiliated Association Representatives Committee.

Dramatized modernization of the kitchen and serious analysis of today's sales problems marked the two sessions of the Commercial Section, presided over by Chairman Walter C. Beckjord. The first meeting opened with a paper on "The Commercial Development of the Gas Industry in Great Britain," by T. P. Ridley, commercial manager and secretary, Newcastle-upon-Tyne and Gateshead Gas Company, England.

A cast of players from the Peoples Gas Club presented "Modernizing the Kitchen," a play in six scenes originally produced for the New England Gas Association by the Malden & Melrose Gas Company. A symposium on kitchen modernization was participated in by six speakers.

## Departmental and Sectional Officers

**NATURAL GAS DEPARTMENT:** Chairman—Frank L. Chase, Vice-President, Lone Star Gas Company, Dallas, Texas; Vice-Chairman—John B. Tonkin, Vice-President and General Manager, The Peoples Natural Gas Co., Pittsburgh, Pa.

**ACCOUNTING SECTION:** Chairman—E. B. Nutt, Hope Natural Gas Co., Pittsburgh, Pa.; Vice-Chairman—A. S. Corson, General Auditor, The United Gas Improvement Co., Philadelphia, Pa.

**COMMERCIAL SECTION:** Chairman—N. T. Sellman, Director, Sales & Utilization, Consolidated Gas Co. of N. Y., New York City; Vice-Chairman—F. M. Rosenkrans, New Business Manager, The Gas Service Co., Kansas City, Mo.

**INDUSTRIAL GAS SECTION:** Chairman—F. B. Jones, Director, Ind. Gas Sales, Equitable Gas Co., Pittsburgh, Pa.; Vice-Chairman—J. F. Quinn, Supervisor, Industrial Sales Engineer, Brooklyn Union Gas Co., Brooklyn, N. Y.

**MANUFACTURERS' SECTION:** Chairman—John A. Fry, Vice-President and Secretary, Detroit-Michigan Stove Co., Detroit, Mich.; Vice-Chairman, Appliance Division—J. Scott Fowler, President, The Lovekin Water Heater Co., Philadelphia, Pa.; Vice-Chairman, Apparatus Division—Merrill N. Davis, Vice-President, S. R. Dresser Mfg. Co., Bradford, Pa.

**PUBLICITY AND ADVERTISING SECTION:** Chairman—Henry Obermeyer, Assistant to Vice-President, Consolidated Gas Co. of N. Y., New York, N. Y.; Vice-Chairman—John F. Weedon, Superintendent, Advertising, The Peoples Gas Light & Coke Co., Chicago, Ill.

**TECHNICAL SECTION:** Chairman—O. S. Hagerman, Engineer, American Light & Traction Co., Chicago, Ill.; Vice-Chairman—C. A. Harrison, Gas Engineer, H. L. Doherty & Co., New York City.

## New Directors and Chairmen



*H. C. Abell  
Director*



*Walter C. Beckjord  
Director*



*Howard Bruce  
Director*



*J. S. DeHart, Jr.  
Director*



*F. C. Freeman  
Director*



*R. W. Gallagher  
Director*



*Conrad N. Lauer  
Director*



*B. J. Mullaney  
Director*



*Herman Russell  
Director*



*Frank L. Chase  
Chairman  
Natural Gas Dept.*



*E. B. Nutt  
Chairman  
Accounting Section*



*N. T. Sellman  
Chairman  
Commercial Section*



*F. B. Jones  
Chairman  
Industrial Section*



*John A. Fry  
Chairman  
Manufacturers' Sect.*



*Henry Obermeyer  
Chairman  
Pub. and Adv. Sect.*



*O. S. Hagerman  
Chairman  
Technical Section*

A Home Service breakfast was held Wednesday morning with about seventy-five present. Miss Ruth Kleinmaier, chairman of the A.G.A. Home Service Committee, led a group of two-minute talks by some service directors on a wide variety of subjects.

The Wednesday meeting of the Commercial Section produced five papers by well-known speakers. "Market Surveys for Sales Development," by Prof. Philip Cabot, Harvard School of Business Administration, Boston, Mass. F. M. Banks, general supervisor of sales, Southern California Gas Company, Los Angeles, Calif., reviewed "Gas Refrigerator Promotion on the Pacific Coast."

Morse DellPlain, president of the Northern Indiana Public Service Company, Hammond, Ind., made a stirring plea for new determination of promotional costs in his paper, "What Price New Business?"

Successful house heating campaigns were described by C. A. Nash, vice-president of the United Light & Power Engineering & Construction Company, Davenport, Iowa, and Paul A. Jenkins, promotion and advertising director of the current sales drive under way in the Chicago area.

The initial session of the Industrial Gas Section was opened with an address by Chairman E. L. Wilder, of the Utility Management Corporation, New York, N. Y., who gave a résumé of the activities and accomplishments of the Section for the year. In view of the present highly competitive fuel situation in industry, the paper by Henry O. Loebell, Combustion Utilities Corporation, New York, N. Y., on "Changing Aspect in the Competitive Market for Industrial Fuels" was of especial interest. J. A. Malone, Consolidated Gas Company of New York, in his paper on "Possibilities of Using Advertising Featuring Industrial Applications To Hold and Develop the Domestic Load," gave a new conception of the use of industrial gas advertising. The final paper of the session by E. D. Milner, industrial research representative of the American Gas Association, covered the subject of "Are Industrial Gas Developments Keeping Pace with Our Competitors?"

The second and final session of the Industrial Section was given over to a paper by C. A. Masterman, Gas Light & Coke Company, London, England, and discussion of the three papers presented at the first session —also discussion of the subject of "Hotel, Restaurant, and Bakery Load" as related to competitive sales methods and servicing. This discussion was led by T. J. Gallagher, The Peoples Gas Light & Coke Company, Chicago. In the paper by Mr. Masterman, entitled "Watson House—an English Research Center," the speaker outlined the organization and aims in interesting detail of the utilization research center of the Gas Light and Coke Company in London, England.

An important feature of this year's convention for industrial gas men was the fall meeting of the Midwest Industrial Gas Sales Council which was held Thursday afternoon, September 28, in the form of an open meeting, with all interested industrial gas engineers in attendance. This program included a paper on "Competitors of Gas," by C. George Segeler, utilization engineer of the American Gas Association, and a report of the Competitive Fuels Committee by the committee chairman, A. A. Schuetz, Milwaukee Gas Light Company.

The session was concluded with a Round Table Discussion.

The Manufacturers' Section met under the chairmanship of D. B. Stokes, United States Pipe and Foundry Company, Burlington, N. J. A review of the progress made by the Gas Appliances Institute was given by George A. Frazer, counsel, Frazer & Torbet, Chicago.

One meeting of the Publicity and Advertising Section was held Tuesday afternoon, with Jay Barnes, New Orleans (La.) Public Service Inc., in the chair. E. Frank Gardiner of Chicago, president of the Public Utilities Advertising Association, brought greetings from that organization. George W. Allen, secretary-treasurer of the Canadian Gas Association, Toronto, Ont., urged more careful analysis of advertising appeals in his paper on "The Pitfalls of Advertising and Advertising Men." A paper by A. P. Ryan, pub-

licity manager of the Gas Light and Coke Company, London, England, discussed "Publicity and Industry" in that country. It was presented by Colonel W. M. Carr.

Charles W. Person, of the A.G.A. headquarters staff, spoke on "P. T. Barnum Started It," describing the tremendous publicity work which made the Century of Progress Exposition a success, and referring particularly to the participation of the gas industry in the fair.

The Technical Section had a full program holding three sessions. Following the remarks of the chairman by J. A. Perry, The United Gas Improvement Company, Philadelphia, Pa., a paper was presented by one of the visiting British engineers entitled "The Preparation of Coke for the London Market," by F. M. Birks, Gas Light & Coke Company, London, England. A review of developments in gas distribution by C. A. Harrison, Henry L. Doherty & Company, New York, N. Y., was the concluding business of the first session.

In the second session following a review of gas production developments for the year by P. E. Eddy, The Peoples Gas Light & Coke Company, Chicago, Ill., a paper was presented by W. H. Fulweiler, The United Gas Improvement Company, Philadelphia, Pa., on "The Gum Problem—Recent Developments." E. J. Brady, The United Gas Improvement Company, followed Mr. Fulweiler with a paper on "The Development of a Non-Stop Pilot Control."

In the final Technical Section session E. J. Murphy, The Brooklyn Union Gas Company, Brooklyn, N. Y., summarized the activities of the Chemical Committee.

The session closed with a Symposium on Purification in which papers were presented on "Gas Purification and Ammonia-Sulphate Manufacture" and a "Résumé of Liquid Purification and Some Recent Developments."

### New Gas Well Drilled in Indiana

A 3,300,000-foot gas well has been drilled in near Petersburg, Ind., by Claude Noble, independent gas operator of Princeton, Ind. The well is one of the largest in Indiana.

# The Gas Industry In America\*

HERE are thoughtful people in every civilized country who believe that one of the important needs of the times relates to means whereby international friendship and accord may be promoted. There are institutions and organizations with long names which exist for no other purpose—they certainly could not have a higher purpose—than to sow the seeds of amity and goodwill, in order that international misunderstandings and antagonisms may be avoided. The American Gas Association has shown its breadth of view in this regard in a very significant manner. Last year it elected a Canadian representing a Canadian member company, as its President. That Canadian is deeply sensible of this signal honor. Canadians, when they visit the United States, never feel that they are strangers in a strange land, but while your president is aware of the fact that very many of you are his friends and familiars, he nevertheless represents a company which operates under another national flag and under conditions which differ in many details and in some fundamentals from the conditions under which gas companies operate in the United States. The compliment implied in this election is that the office was obtained as naturally as if the incumbent had been a member of the Association from Memphis instead of from Toronto, Canada.

Two years ago, the then President of the Association, Mr. Clifford E. Paige, and the Managing Director, Major Forward, were honored guests of the British Institution of Gas Engineers in England, and addressed a representative gathering of the leaders of the industry in the United Kingdom. Later, we saw on this side of the Atlantic a number of the executives in gas enterprises of Great Britain. And now we have the great privilege of enjoying friendly intercourse with

By Arthur Hewitt

President, American Gas Association

visitors from Britain, France and other European countries. How glad we are to have them with us!

In an organization as comprehensive as the American Gas Association, it is difficult, if not impossible, within the limited time available, for me to refer in any considerable detail to the many activities and accomplishments



Arthur Hewitt

of the year. In any event, these matters have been amply dealt with from month to month through the official publications of the Association, while at this Convention papers summarizing our activities in the fields of promotion and research will be presented, together with the report of the Managing Director.

At the beginning of the Association year now about to end, the revenues of the organization were substantially reduced, due in part to lower gross receipts of member companies, but mainly to a reduction in the basis of gas company dues. Our Control Com-

mittee, under the able leadership of Mr. R. W. Gallagher, carefully reviewed the pending and proposed activities of all the Sections and of all the General Committees, and recommended to the Executive Board certain items which, in their opinion, should be suspended, and other items which could be curtailed in cost. For the most part, these recommendations were approved by the Executive Board. The Finance Committee revised the budget of estimated receipts and expenditures so as to trim our sails in accordance with the economic winds.

During the immediately preceding year, there had been a substantial reduction effected in the contributions toward Association support on the part of most of the larger gas companies, when the special fund for industrial gas research was merged with the general Association fund.

These two items—the elimination of special contributions for research, and reduction in dues—brought about a curtailment of approximately 35 per cent in Association receipts from gas companies.

#### Association Lives Within Income

Adjustments were readily made by the Sections, by Committees, and by Headquarters. That work of the Association which was deemed by the Control Committee and by the Executive Board to be the most important, was carried on throughout the year on the reduced basis, and we have lived, as the Treasurer's Report will show, well within the family income.

In the language used by the Control Committee in its report to the Executive Board a year ago, "we are solvent and in no danger of being anything else."

We have been most fortunate in avoiding the fiscal and other troubles which have beset so many national organizations during the past few years.

The saving of expense to our member companies in their direct financial

\* Address before The International Gas Conference and Fifteenth Annual Convention of the American Gas Association, Chicago, Ill., September 26, 1933.

contributions to the Association, is not the only commendable work accomplished through the operations of our Control Committee as endorsed by the Executive Board. By careful analysis of committee activities, and with the cordial support and cooperation of Section officers and general committee chairmen and members, it was found possible to reduce the number of committees and to limit their membership. This has resulted in further substantial savings to member companies in the time and travelling expenses of their employees who are members of committees.

In my opinion, the work has been none the less efficient, and we have covered the more important duties which the Association owes the industry.

It is needless to say that these results could not have been achieved without the splendid sympathetic help given at all times by our executives and by our members generally.

No country in the world has been immune from the difficulties of recent years. As we have heard today, however, the gas industry everywhere has maintained its position of stability and essentiality in all countries here represented, and, I have no doubt, in all other countries as well. It is also gratifying to learn that there are indications of returning industrial and commercial activity in Europe as well as in America.

One of the very vital matters dealt with by your Executive Board relates to the two Codes filed on behalf of the gas industry with the Administrator under the National Industrial Recovery Act, one covering the manufactured and mixed gas industry, and the other the natural gas industry. It was agreed that the President of the United States must be given a full measure of support from this Association in his efforts to relieve the unemployment situation and to restore national prosperity. Copies of these Codes, as finally agreed upon, have been forwarded to all member companies. Here I desire, on behalf of the Executive Board, to thank the members of the special committees appointed to carry on the negotiations with the Administrator, for the splendid service which they rendered to the Association and to the industry

in connection with this most seriously important matter. The duties which fell upon Major Forward and the members of his staff were extremely heavy, and the manner in which these duties were discharged merits our warmest commendation.

No one could have had more sincerely loyal and cooperative support than has been given to me. Our Vice-Presidents, our Treasurer, our Sectional Vice-Presidents, members of the Executive Board and Advisory Council, the executives of our companies and their employees, all up and down the line, have given of their time and thought without reservation, to the interests of the industry through the Association.

#### *Constructive Work by Trade Papers*

It is simply impossible, with such personnel as we have, that an industry could fail to do its full part and maintain its position as an essential element of our day.

It would be an inexcusable omission if I should fail to refer to the splendid constructive work of the trade press of the gas industry. Always ready to help, always welcome at our councils, always keeping abreast of or ahead of the times, they are indispensable and deserving of general support.

The manufacturers in our membership, those who produce gas-making machinery and other equipment, and still more the manufacturers of appliances, have had even more troublesome times than our operating gas companies. Manufacturers' problems are many and difficult, and it is gratifying that we have been able to contribute through our organization towards the attempts at their solution. Our manufacturers by and large, are most progressive, and they have placed at our disposal and at the disposal of our customers, most efficient, most constructive and the most thoroughly satisfactory appliances in the history of the industry. We have nothing to be ashamed of in any way, but a great deal to be proud of. Our manufacturers are well represented on the Executive Board and on a great many of our committees where their contributions are excellent and welcome. They deserve not only consideration, but constructive support in their contributions towards our common cause.

By means of special generous contributions from a group of companies, the larger portion from companies in and about Chicago, we have been able to have a gas exhibit at A Century of Progress Exposition. It is located in Gas Industry Hall, connected with the Home Planning Hall. It represents a modest effort to tell the visitors to the Fair, something about how natural gas and manufactured gas is produced, transported, and made available in many ways. Planning and consummating an exhibit intended for purely temporary purposes, with very limited funds and very brief time, was a most difficult task for our committee, of which Mr. R. B. Harper was the Chairman, and the industry owes them a debt of gratitude.

Someone has said that "Lessons taught by the past are rarely learned, but immediate suffering is the more effective schooling." We have heard much about individual responsibility, collective responsibility, national responsibility, etc., for the unusual conditions which exist today. But one thing is certain (to quote the late Lord Morley): "Things are what they are, and the consequences will be what they will be."

As an industry, we are subject to most of the untoward conditions of the times, and our policies and practices must be adjusted and readjusted from time to time to meet these changed and still changing conditions. New days demand new ways. Like other national industrial undertakings, if we do not deal wisely with our problems while they are ours to deal with, we may drift on till natural forces compel a solution of them in ways which may spell disaster for us. How important it becomes, therefore, that we should adequately support an association which exists for the sole purpose of investigating, studying and advising on the great variety of problems, the wise solution of which is of such tremendous importance to the gas industry and to the public generally. The past history of this Association has demonstrated the willingness of its members to accept chairmanships of and membership on committees of the various Sections, and the Association has been fortunate indeed in the quality and outstanding ability of the

(Continued on page 441)

# Gas Headed Toward Greater Service Throughout World\*

IT is with pleasure that I am here today in my capacity as President of The Institution of Gas Engineers and accompanied by a number of colleagues representative of the gas industry in the British Isles. This is the first occasion upon which a deputation from the Institution has visited your country and it is a great privilege and unique pleasure to address you.

I must confess that this is my first visit to the United States of America. I am proud to think that a principal reason for the visit is to bring to you hearty greetings from my colleagues at home and to offer our most cordial wishes that the greatest possible success may attend this International Gas Conference and the Fifteenth American Gas Convention. Amongst the many events which have occurred and will occur during my period of office as President of the Institution, none will be more treasured in my memory than those of today.

I extend to you, Mr. President, an expression of our extreme pleasure in being present when you hold the responsible and honorable office of President of the American Gas Association. We know your ability and grasp of business affairs from our pleasurable meeting with you when you visited England in 1912 and 1926 and attended the meetings of the Institution of Gas Engineers. We desire to convey to you our sincere good wishes for the unbounded success of this Convention and for your continued prosperity.

Many of my fellow members here today are well known to you personally, having previously visited the United States of America, but others may be known to you only by name.

By Frank P. Tarratt

President, Institution of Gas Engineers,  
Newcastle-upon-Tyne, England

The opportunity has been kindly afforded by you for four of our members to read papers personally at this meet-



Frank P. Tarratt

ing. My Vice-President, Colonel W. M. Carr, will submit a paper written by Mr. A. P. Ryan, Publicity Manager of the Gas Light and Coke Company of London, whilst the paper by my colleague Mr. T. P. Ridley, the Secretary and Commercial Manager of the Company with which I have the pleasure to be associated as Chief Engineer, will be introduced by me and trust that all six papers will prove of interest.

It is with trepidation that I address this great assembly of Gas Engineers gathered together from different parts of the world. At the Convention of the Canadian Gas Association held last week in Ottawa, I had the honor

of addressing the assembly. We had the pleasure of taking part in the discussions at that convention and we are appreciative of the opportunity to be afforded of participating in your deliberations here in Chicago.

The gas industry, like many others in our Islands, has been experiencing since the war a period of abnormal depression in trade, but in spite of this has been able to maintain and extend its position. The marketing of gas and residual products shows scanty evidence of the grievous conditions that have continued throughout the country for some years. More men are employed in the gas industry today than ever; fewer, of course, on the manufacturing side owing to the adoption of improved and mechanized working, but a greatly increased number on the distribution and sales side.

On the Stock Exchange gas stocks stand higher today than ever and most companies are paying dividends at least at pre-war rates. Gas stocks are considered to be a stable investment and the shares are eagerly sought for by the investing public.

As evidence of the extent of the depression in Great Britain may I quote the figures in the table on the following page relating to railways, shipbuilding and coal mining which are considered to give an indication of the industrial position.

The number of shipbuilding berths in the large districts of the Tyne and Wear is 132; at the end of December last only three were occupied. I am glad to say that this year trade has gradually improved and notwithstanding that shipbuilding is one of the last trades to benefit, eighteen berths are occupied today on the Tyne and Wear. During these trying years we have not relaxed our efforts towards maintaining our manufacturing plants in a highly efficient condition and schemes

\* Address before International Gas Conference and Fifteenth Annual Convention of the American Gas Association, Chicago, Ill., Sept. 26, 1933.

Year	Total Railway Receipts Million £	Output of Coal Million Tons	Shipbuilding Tonnage Merchant Vessels
1913	117	287	1,880,000
1920	234	229	2,000,000
1925	196	243	1,084,600
1932	156	212	182,000 (excluding Ireland)

of reconstruction have been ably framed so that every advantage is being secured from the economies to be effected by modern methods of gas production.

#### Further Progress Ahead

The sale of gas has been affected by the variation of trade and an instance we have a case in Newcastle of a large engineering and armament firm which in 1913 took 250 million cu.ft. of gas in 1918 where taking at the rate of 1,200 million cu.ft. per annum their consumption dropped in 1922 to 78 millions. The gas sales department has been able to secure further outlets for gas which have more than made good this huge decrease in demand. In spite of all drawbacks, the total quantity of gas required for all purposes throughout the country has steadily grown, and we are convinced that, with suitable rates available for the different classes of users, we shall make still greater progress.

In an able address given by your distinguished colleague, Mr. Clifford E. Paige, a past president of your Association, at the First International Gas Conference and Sixty-eighth Annual Meeting of The Institution of Gas Engineers in London in 1931, it was explained that you were giving serious consideration to the question of gas rate structure and from the information issued last June by the Statistical Department of your Association it is clear you have made further headway.

The paper to be presented on behalf of Mr. Ridley makes special reference to the legislative restrictions that prevent many companies in Great Britain adopting special tariffs suitable for the various classes of service. Relieved of these restrictions we shall be able to offer rates which will be conducive to the greater development and expansion of our business.

The "declared" calorific value of gas in Great Britain usually ranges be-

tween 440 and 500 B.t.u., although the South Metropolitan Co. still retains the value of 560 B.t.u. The method and number of places of testing the quality, and minimum pressure are prescribed by the gas referees, and penalties are imposed if the quality falls more than 5 per cent below the declared calorific value on any one test, or if the average for any quarter does not reach the prescribed figure. As evidence of the uniformity of the gas supplied, I would refer you to recent quarterly returns of the large London companies showing the margin of quality supplied above the declared value.

	Declared March	Quarter 1933 March	June
Commercial Gas Co.	500	501.7	503.6
Gas Light & Coke Co.	500	503.2	502.6
So. Metropolitan Co.	560	562.1	562.6
So. Suburban Gas Co.	560	561	561.7
Tottenham & District	500	501.3	500.7
Wandsworth & District	500	502	500.7

The regulations of the gas referees have been of benefit to the manufacturers of gas and have given the consumer a feeling of great security.

Since the introduction of the thermal method of charging in Great Britain, great headway has been made in the economies of gas manufacture and the value of such gas to the consumers. I observe that rates based on heating values, rather than gas volumes, were introduced by the Peoples Gas Light and Coke Co., Chicago, in 1930, and since that time forty-four companies serving over four hundred cities and towns have adopted this method of billing. The thermal method of charge introduced into England in 1920 has gradually become almost general throughout the British Isles. Incidentally it is of considerable

interest to us to see for ourselves your natural gas in use and to note what methods are adopted to make gas of such high quality suitable for everyday requirements.

The manufacture of carburetted water gas is not in such general use in Great Britain as in the States; we look upon it as a standby for other plants, to meet periods of exceptional demand and for assistance in regulating coke stocks. With cheap coal available and oil at present prices it does not pay many concerns to make large quantities of carburetted water gas.

#### U. S. Supplies Excellent Coal

During the deplorable coal strike in 1926, from which the British coal trade appears to have never recovered, most gas undertakings, after drawing freely upon their stocks for some time, were compelled to purchase large shipments of coal from abroad and I should like to bear testimony to the excellent quality of the coal supplied from the United States of America, both from a gas and coke making point of view. The following figures are illustrative of typical American and Durham coals:

	American Coal	Durham Coal
Ash	6.66	7.5
Volatile	37.37	32.5
Carbon	55.97	60.0
Moisture	2.19	1.3

Owing to the thin seams at present being worked in most British coal mines, a careful watch has to be kept for dirty coal containing roof stone and other foreign matter. It is now the general practice amongst the larger gas undertakings to sample systematically and to test all deliveries of coal either on delivery to works or at the point of shipment, and in order to protect themselves in the case of coals having an ash content above an agreed figure. This is necessary if the coke produced is to compete in the domestic and industrial markets with oven coke produced from washed coal. The majority of the enterprising colliery companies have installed or are installing special plants at the pithead for washing or dry cleaning the coal.

I believe that 30 per cent of the total output of coal in our country is

washed or dry cleaned and remembering that only a proportion of the total output demands such treatment we should acknowledge the extent to which the coal industry has endeavored to meet our requirements. Gas undertakings on their part are equipping their works with greatly improved coke screening and grading plants, and the marketing of coke is more than ever engaging our serious attention. We can by selection and blending of coals and by the efficient screening and grading of the coke produced by our various carbonizing methods produce a fuel that is eminently suitable for all the requirements of the market.

The extraction of benzol from coal gas is now generally considered an economy process and has been adopted by a considerable number of undertakings. Usually the yield of crude benzol is from 2.5 to 3.0 gallons per ton of coal carbonized.

Associations representing producers and distillers of coal tar in certain geographical areas have been formed with the object of cooperating in the manufacturing and marketing of tar products.

A considerable proportion of the coal tar is absorbed in the making and maintenance of roads, and in this connection, the British Road Tar Association has done admirable propaganda work. As a result of research, specifications have been drawn up which insure that only tar of suitable quality is supplied,—careful attention to the method of its application in road work is most necessary.

There is a tendency towards the use of more viscous tars, and when "blinded" with clean stone chippings the peril of skidding is greatly reduced.

The use of creosote as a fuel in internal combustion engines has attracted attention and vehicles are being run on a light fraction.

Until about 1912 the coal gas produced in Great Britain was manufactured chiefly in horizontal retorts, and considerable developments have taken place in recent years in horizontal retort practice. Fully charged retorts, with extended hours for carbonizing and greater attention to systemized control in the working of settings and in retort house operations, have se-

cured greatly improved results, and with the introduction of semi-silica and silica retorts the working life of the retort settings has been greatly extended.

We still have many strong adherents to this system of carbonization.

There has been, however, a rapid extension in the adoption of various systems of vertical retorts and chamber ovens, and today 60 per cent of the output of coal gas in Great Britain is produced from vertical retorts. The latest type of continuous-intermittent retort will undoubtedly warrant serious investigation, as it would appear to produce an improved, denser coke than in continuous verticals and in increased yield of therm's with reduced labor costs in operating.

#### *Wider Use of Coke-Oven Gas*

More use is now being made by gas undertakings of the supplies of coke-oven gas which are available in certain districts. It can usually be obtained at attractive prices and with guarantees as to constant quality and continuity of supply. The industrial city of Sheffield is only supplying gas produced in the various coke ovens in its vicinity.

The Gas Light and Coke Co., London, installed in 1932 at their Beckton Works a coke-oven gas plant capable of carbonizing 1,200 tons of coal daily, but this is the only instance of an oven plant situated on a gas works. Results of the working of the plant have been published as Communication No. 68 of the Institution and give every indication of it being a successful plant for gas and coke manufacture. The plant is economical in working and admirably suited to form one large unit of the large gas-making plant at Beckton.

The production of a higher grade of refractory material has been greatly assisted by the research staff of the British Refractory Research Association acting in cooperation with the Refractory Materials Joint Subcommittee of The Institution of Gas Engineers.

From the experience gained in recent years with silica materials, it is clearly evident that the retorts, horizontal or vertical, can be maintained at a considerably increased temperature over a long period without risk of failure.

The removal of naphthalene from straight coal gas is now generally practised with great advantage to the undertakings and freedom of complaints from consumers, who previously felt themselves aggrieved by the frequent interruption in supply.

The gradual introduction of Dri-gas methods has gone further to improve supply and will ultimately result in a considerable saving in the costs of renewal of service pipes and repairs to consumers' meters.

The rapid extensions of building operations in recent years in various municipal and private housing schemes, to meet the great shortage that had arisen as a result of the almost complete stoppage of house building during the years 1914 to 1918, has carried with it a correspondingly large extension of distributing mains and services. Most of the newly erected houses have been piped for gas and are usually equipped with lighting points, a gas cooker, wash boiler, and at least one gas fire; even in mining districts, where free coal is usually available, the housewife installs a gas cooker to free her from the drudgery of the coal-fired range.

With the multiplicity of public utility services already existing in the roads and footpaths in our large cities, it is in many cases impossible to find room for additional large mains supplying low-pressure gas, and high-pressure mains of smaller diameter have to be used in order to meet the steadily increasing demand arising in outside areas. These mains are usually of steel, well coated and wrapped, and with welded joints. With the great increase in heavy motor traffic greater care has to be taken in protecting mains against damage by vibration and possible breakage, and with reinforced concrete roads the question of accessibility becomes a serious problem.

Considerable attention is still given to domestic lighting and every effort is made to retain gas lighting—a system generally preferred in medium and small sized houses on account of softness of light, economy, and the grateful warmth that it provides in the winter months. Systems of maintenance of consumers' fittings have been adopted with material success.

Gas is still the chief illuminant for public lamps in most of our cities and towns and has greater mileage of roads in spite of the fact that many municipal authorities own the electricity supply undertakings. Long period contracts for street lighting by gas are constantly being made and renewed. Quite recently the Gas Light and Coke Co., London, secured for fifteen years a contract to continue to light fifty-five miles of streets in London, and The Newcastle upon Tyne & Gateshead Gas Co., recently made a contract, extending over ten years, for one of their districts which will double the previous consumption. Similar achievements have been recorded by many other undertakings. Directional reflectors, clock work control and experiments in the spacing of lamps and the use of different types of standards have contributed to an efficient and reliable service.

Evidence of the general use of gas for street lighting purposes is shown by the following table.

PERCENTAGE OF GAS SOLD FOR PUBLIC LIGHTING (1932)

Metropolitan	Provincial Cos.	Corporation	
Gas Light	.87	Bath	.88
Commercial	.11	Brighton	.89
So. Metropolitan	2.86	Bristol	2.19
	= 2.03	Derby	1.20
<i>Suburban</i>		Liverpool	3.69
Croydon	2.17	Newcastle/Tyne	6.21
Hornsey	4.05	Plymouth	1.79
Lea Bridge	—	Portsmouth	.72
N. Middlesex	4.18	Rochester	1.90
Southgate	4.17	Sheffield	5.60
So. Suburban	2.18		3.33
Tottenham	4.47	Dublin	2.11
Wandsworth	3.59		
Watford	1.48		
	3.00		
<hr/>			
Total average = 3.79			

All consumers' meters must be stamped in accordance with regulations made by the Board of Trade and are not permitted to be used if they are more than 2 per cent fast or 3 per cent slow. All makers guarantee to maintain free of charge all meters for a period of two years.

There is considerable variation in the specification of consumers' meters at present on the market which come

under various denominations, such as "lights," "standard," and "high capacity." The Meters Committee of The Institution of Gas Engineers is engaged in preparing a report as to the possibility of standardizing the sizes and the rated capacities of dry gas meters.

Considerable progress has been made in the standardization of gas appliances in recent years, but we have not yet reached the stage of stamping consumers' apparatus and fittings which has been so successfully carried out by the American, Canadian and French associations. A Central Gas Advisory Board has been recently formed, however, and the improving of the efficiency and safety of gas apparatus will come within its purview.

#### Meeting Competition

Amalgamations and the grouping of gas undertakings within a limited area must play a great part in assisting the industry to secure the consumption that must accrue from regional develop-

I hope to preside over its Seventy-first Annual General Meeting. Much valuable work of a scientific and technical nature has been and is being carried out by the Institution, whilst its education scheme, which has been in operation for ten years, is an unqualified success. Admittance to corporate membership of the Institution necessitates the passing of examinations presented by the Council, together with a period of practical training and responsibility. By this means we secure men of the right type; thoughtful and enterprising, with trained minds and thoroughly competent to hold positions of responsibility in the gas engineering profession.

The many district associations affiliated to the Institution afford material assistance to members, who are able to meet at intervals during the year and discuss technical and commercial problems.

In its research the Institution has for long been closely associated with Leeds University, at which the Livesey Professorship in coal gas and fuel technology was founded in 1908, as a memorial to the late Sir Geo. Livesey, whose great work for the gas industry, and his introduction of co-partnership, will always be remembered. Over sixty gas companies, having an aggregate capital now nearing £90 mill. sterling, have adopted this system, and 45,000 employees are enjoying its benefits.

An Institution Gas Research Fellowship, awarded annually, has been established at Leeds University and scholarships to perpetuate the memory of Sir Corbett Woodall and Wm. Cartwright Holmes have been endowed. These awards are much sought after.

The Standard Conditions of Contract were adopted by the Institution of Gas Engineers and The Society of British Gas Industries in 1909 and revised in 1917 have proved invaluable to the Industry.

The National Gas Council, formed in 1916, has as its president Sir David Milne-Watson, governor of The Gas Light & Coke Co., London. By his untiring zeal and ability Sir David has contributed in very great measure to the usefulness of the Council and in promoting the best interests of the Industry. The principal work of the

ment. With economies that can be effected by cheaper administration costs, the mechanization of office equipment, ability to purchase in the best markets, and the availability of a highly trained business staff, competition will be met on an organized basis.

The Institution of Gas Engineers was founded in 1863, has 1,500 members and received its Royal Charter in 1929; in June of next year, therefore,

Council is connected with legislation, negotiations with government departments and municipal and other bodies, and the giving of advice to undertakings on important matters of policy.

The Federation of Gas Employers has acted for most gas undertakings since 1919, and has rendered incalculable service to the industry in negotiations as to wages and similar questions.

The British Commercial Gas Association, founded in 1911, has Sir Francis Goodenough as its Executive Chairman; he is well known to all of you for his able advocacy of good salesmanship, attractive publicity and advertising as the means of providing the public with all information as to the economy and utility of gas.

Recently a scheme for the education and training of gas salesmen has been launched, which should prove of immense service to all gas sales departments and provide men better equipped to discuss the various needs of all classes of consumers.

The Society of British Gas Industries comprises all the leading manufacturers of gas plant and appliances and renders valuable support to the Institution, the National Gas Council and the British Commercial Gas Association in movements essential to the soundness and expansion of the industry.

#### *Gas Headed Toward Greater Service*

If an attempt is made to survey the gas industry throughout the world, we are at once struck with the constant progress that has been made in the use of gas for multitudinous purposes in the domestic and industrial life of the community; we find evidence of strength and vitality and will to afford better and greater service. I look forward to the time when gas will be in use in every house and establishment for cooking, heating and refrigeration and I believe that we are on the eve of great developments.

With the advise and cooperation of our highly trained scientific and technical men, whose time is employed in investigating these matters, we are assured of progress, although I am of the opinion that in the British Isles we have only touched the fringe of what can be done in the supply of gas for industrial purposes.

With the exception of small scale cooking the potentialities of gas in divers directions cannot truthfully be said to have been as yet explored in Great Britain.

Much remains to be done in the way of substituting gas for coal in the older type of large house, in clubs, restaurants and hotels. Possibly the greatest prospect of development lies in heating water, as an automatic hot water supply is still quite unknown in a large number of houses.

Coke-fired boilers have met the position to some limited extent, but this involves the necessity of storing fuel and removal of ash and creates unwanted heat in hot weather. I am convinced that the automatic nature of gas water-heating will commend itself to a large number of people.

If oil is to be considered as a possible substitute it must be remembered that what oil can do gas can do better—no storage tanks require to be provided on the premises necessitating periodical cleaning. The standard of comfort in the matter of warmth in our homes is assuredly rising.

We shall hope by paying more attention to these methods to consolidate if not extend the load we already hold.

In the industrial field the prospects appear more attractive as the use of gas for industrial purposes cannot be said to have been seriously considered with the exception of one or two districts. As the industrial depression disappears a large number of furnaces will probably be scrapped and replaced by modern furnaces capable of more accurate control. We know there are thousands of industries each employing gas for several processes and the great disparity between the huge potential load and the small proportion of our total output is the basis of our faith in the future of industrial gas.

General engineering has perhaps shown more revolutionary tendencies in production methods than any other of our industries. To meet the new conditions the gas industry has endeavored to offer gas apparatus providing at once the certainty and the degree of flexibility so necessary to plants operating on more or less mass production lines.

In North Eastern England, engineering firms of world-wide reputa-

tion now depend entirely on gas for the whole of their heat treatment plant which almost without exception is operating under automatic temperature and atmospheric control.

Generally, in the case of industries requiring vast quantities of heat, it would appear that the advantages of gas will justify a comparatively high thermal cost because the final cost is almost invariably lower than the final cost of other fuels, even with good industrial coal at 14/-(\$3) per ton.

Speaking on behalf of my own company, a large rolling mill furnace has been recently equipped with gas, resulting in a saving of 8-10 per cent over the producer gas plant previously used, and success has also been secured in the equipping with gas firing of a very large bread bakery.

Interesting experimental work is that relative to compressed gas for the propulsion of motor vehicles: with the aid of a four-stage compressor gas is compressed to 5,000 lbs. per sq.in. in special alloy steel containers and fed to the cylinders permanently fixed to the vehicle chassis and charged to a pressure of 3,000 lbs. per sq.in.

In the Newcastle experiment it was demonstrated that a single deck motor bus could be equipped with a charge of gas sufficient to carry it seventy miles. It would appear that 250 cu.ft. of gas (500 cal. val.) is equivalent to 1 gallon of petrol. So far as it is possible to estimate, the cost per gallon equivalent after making allowances for all compression interest and depreciation charges should not exceed 8.3d compared with say 1/1d per gallon for petrol.

Consideration is being given to the question of supplying bottled gas for domestic and small industrial purposes outside the normal distribution of gas undertakings and it is thought that these developments will go hand in hand with the gas traction project.

I trust I have not wearied you by responding to the suggestion that I should say something of what we are attempting in the British Isles. We come to the United States of America as representative of the British Gas Industry, anxious if possible to impart knowledge but always willing to learn. Chiefly, however, we want to meet you as engineers and commercial

(Continued on page 441)

# International Gas Parley Promotes Gas Progress\*

If I have today the honor of addressing a few words to you, it is to thank you, first, in the name of the International Gas Union for the kind invitation to the International Gas Conference which is to be held at the same time with your Fifteenth Annual Convention, and I wish to congratulate you on your important meeting which, like your famous exhibition, is a sign of a Century of Progress. In the meantime, I have the honor and the pleasure to thank the American Gas Association in the name of the Swiss Institution of Gas and Water Engineers for the invitation to your Congress, and as I do this, I would not forget to thank your Association for the kind reception you prepared for a small group of our organization in the autumn of 1919. I was then also fortunate in being a member of the party which was welcomed so heartily by your first president, Mr. Cortelyou; your managing director, who was then Mr. Oscar Fogg, and other members of your committee.

You gave us then such a wonderful introduction and you organized our trip through the States in such a splendid manner, that we reaped considerable benefit from our studies of the American gas industry. I may say that the development in the use of gas in industry and especially in hotels, not only in our country, but in some other parts of Europe, has been greatly influenced by the experience we had in your country.

Since our visit in 1919, the relations between the American Gas Association and our Institution has always been very cordial.

Mr. President and gentlemen, this example of the advantage of good relations between the gas engineers of two quite different countries shows very clearly what collaboration would give to us all. Will you allow me,

\* Address before the International Gas Conference and Fifteenth Annual Convention of the American Gas Association, Chicago, Ill., Sept. 26, 1933.

By Fritz Escher

President, International Gas Union  
Zurich, Switzerland

therefore, to speak to you as the President of the International Gas Union. Let me say, in the first place, how highly it has been appreciated by us all, that at the first International Gas Convention at London, in



Fritz Escher

1931, when the International Union was founded, your Association was represented by your president, Mr. Clifford Paige, now a vice-president of the Union, and your managing director, Mr. Alexander Forward, and we are very glad that your Association is a member of the International Union. By joining the Union you expressed the conviction that international collaboration is very desirable as a means of technical progress and for our own industry in particular.

You have again supported this point of view by the invitation to your Annual Convention which is now beginning as an International Gas Conference in the marvelous

setting of your Exhibition—A Century of Progress.

After this, Mr. President and Gentlemen, it would be quite unnecessary to speak to you about the aim and purpose of the International Gas Union. You know yourselves what it means. But let me explain in a few words, only, some of the chief points of the principles of the statutes. As the World Power Conference will be the forum for all discussions about all kinds of energies, so will the International Gas Union be the special centre of the gas industry.

The International Gas Union is a union in which the gas industries of all countries will be represented on the same basis. The leading gas organization of each country will be a member, so that the Union will consist of as many members as there are countries represented in it.

Each country is represented in the Committee by two delegates. The actual members are:

American Gas Association.  
Association des Gaziers Belges.  
Canadian Gas Association.  
Deutscher Verein von Gas und Wasserfachmännern.

Federazione Nazionale Fascista delle Industrie Gas ed Acquedotti.  
Institution of Gas Engineers.

Jugoslavensko Plinareško i Vodovodno Udruzenje.

Oesterreichischer Verein von Gas und Wasserfachmännern.

Plynarenske a Vodarenske Sdruzeni Ceskoslovenske.

Schweizerischer Verein von Gas und Wasserfachmännern.

Svenska Gasverksforeningen.  
Union Syndicale de l'industrie du Gas en France.

Vereeniging van Gasfabrikanen in Nederland.

Zrzeszenie Gasownikow i Wodociagowcow Polskich.

The principal purpose of the Union is to help development of the

(Continued on page 442)

# The Association's Job\*



Alexander Forward

**I**T is the merest truism to say that the Association's job is to constantly, intelligently and efficiently serve the industry and that the industry has a right to expect the responsible officers and employees of its National Association at all times to give the best they have. It is not enough either that they give the best they have; they must have something to give; must have the ability and the facilities to call for cooperation upon the very large group within the membership who are always ready to contribute their time and their thought.

It is the Association's job to be at least one step ahead of the main body of the industry, because we are so fortunate as to have at our disposal constructive work of all elements.

It is the Association's job to be ready to defend the industry from attacks by those who would for one reason or another deal it injurious blows.

It is still more the Association's job to be on the offensive in the advancement of the industry's best interests.

Above all, those charged with the responsibility for an association's affairs must have the perspective which looks beyond the immediate moment and can accurately appraise factors affecting us in the years to come.

It is Headquarters' job to collect and disseminate information of interest and value to its members, to evolve through its committee activities plans for increasing the usefulness of the industry to its customers; to direct the research activities of the industry into a unanimity of thought, purpose and execution. Around these activities cluster a large volume of such collateral duties and responsibil-

By Alexander Forward

Managing Director, American Gas Association

ties as the safety of our employees and the public, the production and promotion of efficient and attractive domestic and industrial appliances and to lend every possible form of encouragement and support to the individuals who desire to develop their technical skill or their commercial qualifications and who will be at the helm in the days to come.

It is the job of Headquarters to maintain the dignity of a great American industry and to demonstrate its place in the sun. Its job is not done unless that is done.

One important duty of Headquarters is to be the sponsor for the statistics of the industry. The latest figures have been printed for the use of this Convention and I shall repeat but very few of them here.

During 1932 the revenues of the entire gas industry in the United States aggregated 753 million dollars, while at the close of that year the industry was serving in excess of 15½ million customers.

During 1932 the quantity of natural gas consumed in the United States amounted to one trillion three hundred and seventy-five billion cubic feet. Of this total 40 per cent was used for field purposes and in the manufacture of carbon black, the remaining 60 per cent being distributed by pipe lines and gas utilities for domestic, commercial and industrial uses.

Despite the generally lower price levels of competing fuels prevailing throughout the year, sales of the manufactured gas industry aggregated 358,876,000,000 cubic feet during 1932, a decline of 8 per cent from the preceding year. Sales for domestic uses, other than house heating, declined 5 per cent, while industrial-commercial sales were off 20 per cent. Sales of manufactured gas for house heating purposes, however, registered a loss during the year of but one per cent.

In 1932 total operating revenues aggregated nearly 413 million dollars, which was a decline of 6 per cent from the preceding year.

Operating expenses registered a decrease of more than 13 million dollars, dropping from \$212,006,000 in 1931 to \$199,099,000 in 1932.

Annually I have directed the attention of the industry to the continued and consistent increase in the burden of taxation. In 1924 our taxes amounted to 8.7 per cent of the operating revenue of the industry, whereas by 1932 the rate had risen to nearly 11 per cent of our entire operating revenue. The grand total last year was no less than \$75,200,000. In that year the taxes of the natural gas industry amounted to \$5.43 for each natural gas customer served while in the same year taxes of the manufactured gas industry amounted to \$4.57 for each customer served.

This tax situation is now nothing short of alarming. It is graphically shown in our statistical review published for this meeting. The subject was most ably dealt with on yesterday by Mr. Paul S. Clapp in his address before the Natural Gas meeting and I commend his talk to the careful, not to say prayerful, attention not only of every executive but of every individual in the industry. While I agree with Mr. Clapp that we should use every means in our power to educate the public in this critical matter, I am not so sanguine as he that we can succeed in doing so.

As a matter of fact, we are told frankly by some of our statesmen in Washington and in State capitals that increasing taxation is the easiest way to take money away from the owners of utility securities because it is said they have fared rather better than the investors in other lines; the theory being that no matter if the utilities did not share in the high profits of prosperous years, nevertheless they have more money than other people now and it must be taken away from them. So Congress and the Legislatures sock the inves-

\* Address before The International Gas Conference and Fifteenth Annual Convention of the American Gas Association, Chicago, Ill., September 27, 1933.

tors in utility securities. There are perhaps two million of them; will they take it lying down?

As a result of higher costs, particularly increased taxation, our net operating income declined 11 per cent, dropping from \$131,100,000 in 1931 to \$116,799,000 in 1932. In the former year 29.80 cents out of every dollar of operating revenue was carried down to net operating income, while in 1932 the figure had fallen to 28.23 cents.

In addition to this decline in net operating income, fixed charges increased by nearly 8 per cent, with the result that net income available for dividends and surplus declined 20 per cent for the year.

At the close of 1932 the gas industry in the Dominion of Canada served over 694,000 customers, an increase of 1.8 per cent during the year, while the revenues of the industry aggregated in excess of \$21,500,000. Of this total, nearly 13 million dollars represented revenue from the sale of manufactured gas, while revenues from natural gas sales amounted to over \$8,500,000.

The number of customers served with manufactured gas in Canada gained nearly 1.7 per cent during the year, aggregating some 566,000 at the close of 1932. Even more pronounced gains were registered in the number of customers served with natural gas which rose from 125,000 to nearly 128,000, an increase of 2.1 per cent.

On two occasions within the Association year about to close the necessity for a solid front has been fully demonstrated. One occasion was the proposal in the Congress of the United States, made for the second consecutive year, to impose upon the gas industry a tax upon gross receipts similar to that for which the electric industry has been most unjustly singled out. But for the American Gas Association every company represented in this room would be paying 3 per cent Federal tax on their receipts. That would wipe out the returns on most of the investments in common stock, in some cases the returns on investments of preferred stock and in others would bring about default on bonded indebtedness.

The other instance to which I refer was our participation in the National Industrial Recovery program discussed by our President yesterday. It was necessary for us to convince the Administration in Washington that our Committee was speaking for the gas industry as a whole. Otherwise we cannot be heard.

A discussion of National Industrial Recovery was scheduled by the Program Committee for this morning's session. I have been told that any statement on this subject properly belongs as part of my report. Unfortunately, that makes my occupancy of this stage a little longer than I had anticipated.

It did not appear from the measures adopted nor from the debates in Congress that there was any intention on the part of any division of the National Government to bring the operating public utilities, all of them under regulation and mainly so by the separate States, under the provisions of the Act. As a matter of fact statements were publicly made after the adjournment of Congress by members who had figured prominently in the preparation, consideration and passage of this legislation, to the effect that utilities would not be included. Accordingly, there was a brief period in which the gas companies had no activity in this respect except for consideration of the subject by a group of companies engaged in interstate commerce, notably the owners of natural gas pipe lines.

Following is a portion of the statement made by President Hewitt to our Executive Board at its special meeting held on August 1 to consider this subject:

"The National Industrial Recovery Act as passed by Congress and approved by the President did not seem applicable to public utilities. That act was intended as the keystone of the Administration's program for industrial recovery, to reduce or eliminate unemployment by reduction in working hours, and in connection with expenditures for public works, to increase the purchasing power of labor, and indirectly the total population, by fixing minimum rates of pay. Agreements between units in an industry without accountability for violations of the anti-trust law are implicit in this legislation.

"The public utility industry is probably responsible for less unemployment

than any other major industry. Its wage scales have been fairly well maintained and its working hours are generally reasonable.

"Besides, it was felt that the Administration could not possibly intend to place the public utilities between the upper millstone of federal regulation of hours and wages and the nether millstone of state and local regulation as to rates and service.

"We cannot store our product and hold it for favorable market conditions as can industrial manufacturers, nor can we of our own volition increase the price of our product in response to advancing costs of labor and materials, and constantly mounting taxes, as industrial organizations generally are expected and even encouraged to do.

"Disturbed because of the slowness in development of the presentation and approval of codes for industry, the President determined to issue, and did issue, a blanket code, said to be designed for voluntary adoption by industries generally under organized salesmanship, to be in force in the interim of formal preparation and presentation and approval of industry codes. Public utilities are referred to by name in the President's Reemployment Agreement, and spokesmen for the Administration have now specifically stated that utilities are intended to come in under the terms of the Act."

The attitude of the Administration may be stated in the following extract from a letter written by the Deputy Administrator of the National Industrial Recovery Administration in charge of public utility codes.

"Relying on behalf of General Johnson, I beg to advise that this Administration solicited the full cooperation of the public utility companies of the United States in the President's Reemployment Program. The American Gas Association, representative trade organization of the gas utility industry, responded to this invitation and at the direction of General Johnson submitted on August 5 codes of fair competition for the gas operating utility industry and the natural gas industry. They requested the substitution of certain paragraphs from their proposed codes for corresponding paragraphs from the President's Reemployment Agreement. These requests have today (August 11) been granted."

Committees were appointed as a result of consideration of this matter which prepared separate codes for the manufactured-mixed gas industry and for the natural gas industry which had somewhat different employment and operative problems.

The code was prepared for the manufactured-mixed gas industry by

a committee of which Mr. Herman Russell of Rochester was Chairman and which included also Messrs. H. C. Abell of New Orleans, F. C. Freeman of Providence, W. C. Beckjord of Boston, H. O. Caster of New York, C. E. Paige of Brooklyn, Geo. H. Clifford of New York, Paul Clapp of New York and W. G. Rudd of Chicago.

The Natural Gas Code is in the hands of the following committee: Mr. R. W. Gallagher of Cleveland, Chairman; Messrs. T. B. Gregory of Pittsburgh, H. L. Dickerson of New York, J. D. Creveling of New York, L. E. Fischer of Chicago, Floyd C. Brown of Chicago, Burt R. Bay of Kansas City, James H. White of Birmingham and A. B. Macbeth of Los Angeles.

These committees went to Washington and began the long ordeal of conferences, advances and retreats and dealings with an administration which by reason of its rapid growth was not and could not be organized for rapid transaction of public business.

It was determined advisable to follow the example of other organizations and to file with the Administration paragraphs from our codes dealing with maximum working hours and minimum pay, in substitution for the paragraphs dealing with these subjects in the President's Reemployment Agreement.

After innumerable discussions and delays, very trying on the patience and nerves of the committee, and very exhausting in the warmest weather in a decade, modified substituted paragraphs were approved on August 11. Copies were transmitted to all of the members of the gas industry and no doubt everybody is familiar with it.

Association Headquarters does not know how many companies have subscribed to the codes. Many companies reported their signature to the President's Reemployment Agreement as modified by the substituted paragraphs, some by wire, some by letter. It is known that there are a number of companies which executed the agreement and did not report to the Association.

Naturally the telephone and telegraph wires and the mailing facil-

ties of Uncle Sam were taxed for days and weeks in discussion of the codes and their applicability to many situations. Gradually these adjustments were worked out until now the inquiries are relatively few in number.

So far this report has dealt with the gas companies. The manufacturers of appliances were first in the field and have done an enormous amount of work. All of them are engaged in interstate commerce and they began to prepare even before the adjournment of Congress. A meeting of range manufacturers was held during the time of our Association's Spring Conference in Chicago on June 1 where the groundwork was laid for organization to deal with the National Recovery Program.

As a result of this meeting and subsequent meetings, the manufacturers now have organized in the gas appliance and apparatus industry five institutes, namely:

Gas Range Institute.

Gas Space Heater Institute.

Gas Water Heater Institute.

Gas Boiler, Furnace and Conversion Burner Institute.

Gas Apparatus and Accessories Institute.

These five institutes, together with members at large, constitute the Gas Appliances Institute, which it is expected will be the agency recognized by the government to administer such code as will be finally approved by the President of the United States.

The purpose of organizing in this manner is to afford all manufacturers, registered in the institute to which they subscribe by virtue of the type of appliance made, an opportunity to establish within their own branches codes of fair competition, supplementary of course to the master code.

A preliminary hearing on the master code was held in Washington on Friday, September 15, at which certain suggestions were offered by government officials in matters of verbiage, and it is expected to submit the final code for public hearing some time early in October.

That is how the matter rests at this time. The approval of substituted paragraphs is understood to be temporary.

No more convincing demonstration of the necessity for organization has been made we venture to say in the history of the gas industry.

It is neither necessary nor desirable to discuss in detail the activities of the Association or of its Headquarters' Staff. Discussions of these activities appear in many places in this Convention. A mere recital would serve to take up the entire time of the meeting. I venture to say that even those of our officers and directors who are most conversant with our activities would be amazed at their scope and their volume. Yet it is still true that there are many of our member companies which have not yet caught the knack of availing themselves of the information and assistance assembled at considerable expense and in great cost of time and effort in Association Headquarters. We wish more members would avail themselves of this service.

All we do cannot be attempted, much less accomplished, without the sincere and wholehearted cooperation to our members who serve in various capacities including the Executive Board, the section officers and the general and sectional committees. President Hewitt has been throughout the year available for any kind of service at any moment and his sincerity, his grasp of fundamentals and his graciousness have been of great value to the industry in a difficult period.

All of this is a part of the Association's job.

### Edouard Kaeuffer Dies at Home in France

**E**DOUARD KAEUFFER, Chevalier of the French Legion of Honor and former President of the French Technical Gas Association, died on August 4 at his home at Paladru, France, aged sixty-nine years. Funeral services were held on August 7 at Montferrat.

### Heads Stove Co.

**F**W. WATERMAN, JR., formerly engineer of manufacturing, has been elected president of the Century Stove & Manufacturing Co., Johnstown, Pa., succeeding the late John H. Waters.

# A New Concept In Utility Regulation\*

■ AM deeply appreciative of the invitation extended me to appear on your program.

It would seem to be especially appropriate, for the reason that I now occupy the same office that Major Forward, your Managing Director, formerly occupied. The people of Virginia are great admirers of Major Forward because he is a most admirable fellow, and because of the very efficient work he did while a member of the Official Family of Virginia.

It would also appear to be opportune for the reason that in Virginia was had the first public use of gas in America, many years before the organization of the Baltimore Company. I rely on the authority of the American Gas Association when I say that in 1803, a part of Main Street in Richmond, Virginia, was brilliantly lighted by a huge gas lamp, erected on a forty-foot tower.

An inventor named Benjamin Henfrey had come to Richmond the Winter before, and held an exhibition of his new invention "Inflammable Air" at Hay Market Garden. Admission was fifty cents, and thousands of people witnessed the wonderful sight. The new light was made in a tea-kettle from wood and pit coal. In order to satisfy the people that the demonstration was not a fake, a committee of six prominent citizens, including the Mayor, was invited to see the experiments of lighting and cooking. The Committee's report was convincing, and an octagon light tower was erected. In a few months the large lantern, forty feet above the ground, was supplied with gas generated in a still in a cellar. It was successful at first, but did not last long, and Main Street went back to the animal oil lamps.

We, who are born and bred Virginians believe that almost everything worthwhile, either directly or indirectly, had its beginning in Virginia. It would be difficult for a Virginian to make a

\* Address before The International Gas Conference and Fifteenth Annual Convention of the American Gas Association, Chicago, Illinois, September 28, 1933.

By H. Lester Hooker

President, National Association of Railroad and Utilities Commissioners

speech, at any time, without saying something about our great State.

Virginia has been wonderfully blessed by having its affairs of State well managed. Its house was put in order by the reorganization of State Government under the administration

this experienced and capable leader, the future affairs of Virginia will be efficiently managed.

Frankly, I think that the practice of electing Public Service Commissioners to these high public offices should be encouraged, because the duties of Public Service Commissioners make it necessary to become familiar with all of the important functions of government.

Aside from the long list of men of ability and vision, who have served at the head of the government of Virginia, we have had, all through the years, our most representative citizens serving as our law makers, and we in Virginia are really a happy and contented people.

#### *Speaks as Individual Commissioner*

Your program lists me as President of the National Association of Railroad and Utilities Commissioners, but, as you may know, my duties in that office are quite incidental to my every-day job as a member of the State Corporation Commission. So, in accepting the invitation with which you have honored me, to address the International Gas Conference and your Annual Convention, I do so, not as the spokesman of my associates in the National Organization of Utilities Commissioners, but as an individual Commissioner.

The Public Utility Commissions in various states are of comparatively recent origin as governmental control agencies. Prior to 1907 the modern regulation of public utilities by commissions was almost unknown. In that year, however, New York, Wisconsin, and Georgia created commissions with broad powers; and in the years that followed, most of the remaining states took similar action. The State Corporation Commission of Virginia was created by the Constitution of 1901-2.

These state utility commissions were called into being primarily to regulate the railroads. They are essentially an outgrowth of the railroad commissions which had been created in many states after 1870. Those of you older than I will recall that the period of the '70's.



H. Lester Hooker

of Governor Byrd. History will record him as having been one of the outstanding Governors of the Old Dominion. He is now a member of the U. S. Senate. He was succeeded by Governor Pollard, whose administration will be noted for its efficiency and economy, and will reflect much credit on him.

The next Governor of Virginia will be a Public Service Commissioner. He served for several years as one of my colleagues, resigning April 5 to become a candidate for Governor. He was nominated August 1 by the majority party, will be elected November 7, and assume the duties of the office in January, 1934. Under the guiding hand of

witnessed a rapid and remarkable change in sentiment with regard to railroads. Led by the National Grange, an organization of farmers, the general public arose in arms against what they deemed intolerable abuses practiced by the railroads. There swept through the country, particularly the Middle West, a wave of drastic legislation creating commissions to regulate the railroads and particularly to regulate their rates.

The grievances of the people were numerous. The chief grievances were the high level of rates and the gross discrimination of rates. But there were many other factors that provoked or set popular resentment against the railroads—especially the attitude of railroad officials that their enterprises were organized for profit and that they owed no obligation to the public. The public hostility was intensified also by the fact that many of the railroads were owned by "absentee owners" who were immune from the force of public opinion and in need of being subjected to the force of law. There was, of course, the further charge that the railroads were making fabulous profits without rendering commensurate service.

The railroad commissions, hence, were created primarily to stop abuses and to fix fair rates for a business which public opinion insisted as affected with a public interest. In the years that followed as the commissions developed and as the concept of regulation developed, the original ideas of the extent of commission control gradually faded away. Accented, of course, by the organization of the Interstate Commerce Commission and government operation of railroads during the World War, the control of commissions went farther and farther into the operations of the railroads until in late years the railroads have been under a very complete control of various governmental commissions.

A combination of circumstances has resulted in the engendering of a public opinion with respect to water, gas and particularly electric companies much akin to that which prevailed in the '70's with regard to the railroads. Individual incomes emaciated by the depression have kindled in the public mind a resentment against those public service corporations whose rates have not declined in harmony with incomes. The

Federal Trade Commission's investigation of holding companies and the collapse of certain utilities have combined to foster a strong public opinion hostile to the absentee ownership of utilities by holding companies. Tales of watered stock, fictitious property values and excessive charges for holding company services are bandied by rate payers. The public is aroused and is seeking answers to an assortment of questions engendered by the aforementioned developments.

#### *What Are Fair Rates?*

The fundamental hypothesis of commission regulation is, of course, that when the property of an individual is used in a manner to make it of public consequence to affect the community at large, it becomes affected with a public interest. And when "one devotes his property to a use in which the public has an interest, he, in effect, accords to the public an interest in that use and must submit to being controlled by the public for the common good." More simply, it is recognized that public service corporations are essentially monopolistic enterprises and since the public is dependent upon them for essential service the rates that these monopolies shall charge for their services must be regulated by representatives of the people. A fundamental conception of all public utility regulation and a particularly important one in the minds of the public is that of the determination of fair rates.

But in the light of the present public clamor what are fair rates? It is, of course, extremely difficult to condense the countless expressions of public opinion into a concrete definition of what the masses consider is a fair rate for a utility service. Probably the statement that comes nearest to expressing the idea in the minds of the public today is about as follows:

A fair rate, Mr. Average Man would say, is one which for a community or a section compares favorably with rates for similar service in similarly situated communities, and at the same time allows the company under good management and without extravagant overhead to make a sufficient profit to attract the investment of new capital when needed in the enterprise.

This public definition, to be sure, is not identical with the technically

phrased definitions of fair rates laid down by the courts in numerous cases. But, by how much does it differ in principle from the fundamental thought upon which the court dicta are based? The public, as a whole, it may truly be said, is fair minded in the last analysis. The most outspoken critics of prevailing rates may be determined to wreck the utilities, perhaps. The general public, however, I sincerely believe, is willing to "live and let live"; it is willing to pay rates for the utility services it consumes sufficient, under normal conditions, to cover the operating expenses, taxes, and a fair return on the fair value of the property of the public service corporation rendering the service. Is this not the same principle which permeates all judicial rulings as to the determination of fair rates?

If, then, heed is to be given to the public's definition of fair rates, the determination of rates for utility services will take a somewhat different course from the more or less standard practice in the past. If the state regulatory commissions are not to wholly disregard the public clamor and to refuse to interpret the manner in which they are determining the fairness of the rates the average man pays, the formal, rigid legal processes of the past must be modified. An old adage is to the effect that the dislike of an individual is due to the lack of acquaintanceship. The same is true of utility regulation. The public distrust of the fairness of prevailing rates is due, in large part, to the fact that the public is wholly unacquainted with the methods by which the commissions must work and the reasons upon which the commissions arrive at their decisions.

To acquaint the public with the facts of the case, the facts, which if made clear to the ratepayers, will satisfy many of the complaints they now raise, the old processes by which rates have been determined are largely inadequate. By the old processes of rate cases, the several methods of arriving at the present value of the used and useful plant are employed, and various values of physical property are presented by engineers and accountants, and after this is determined, various overheads are allowed to arrive at the present value of the physical plant. The generally fixed charges are determined, such as operating costs, taxes, depreciation, etc.,

and a rate fixed that will pay these and, in addition, show a net return or profit to the stockholders.

#### *New Burdens on Commissions*

This process is still useful, but the public has become dissatisfied with only this. In many cases, it does not answer the question in the public mind in the matter of variations in rates between nearby places. It does not answer the question raised by the public as to whether the physical plant installed is intelligently planned or is the most efficient plant available, nor does it answer the public question as to whether or not the company is efficiently managed.

The public apparently does not intend to pay a rate based on plant valuations where the plant is not modern or is not efficient. The public does not intend to pay a rate that is higher than neighboring rates because of inefficient or excessively costly management.

The public is very much interested in the question of holding companies and their charges and activities. It must be satisfied that charges paid holding companies are fair and reasonable.

These inquiries on the part of the public have placed new burdens upon many commissions. Many of us will say that this type of inquiry is very far afield, and yet something must be done to answer the questions of the public. It means for many of the commissions a very definite enlargement of their technical staff of engineers and accountants, a type of employees not ordinarily needed.

The investigation of rates today, it seems, must not only deal with the actual determination of fair rates, but, in addition, it must be so designed as to interpret to the public why the rates fixed are fair and how their fairness has been determined.

It may be too radical a statement to say that on this type of investigation rests the future of privately owned public utilities, and yet, strange economic changes are taking place in this country almost overnight. It may be, if the commissions in the various states do not interpret their findings to the general public in an adequate way, that, in many localities, experiments will be started in publicly owned plants that will destroy literally millions of dollars of useful property that does now serve

the public as economically as will the publicly owned plants. This type of competition, under a system of proper regulation, destroys useful property and is pure economic waste.

Of course, it is not the function of a public utility commission to defend utilities under its control. But certainly the commissions cannot be criticized for developing and presenting all of the facts so that intelligent conclusions can be reached by the public. The fair-mindedness of the general public can be relied upon to appreciate the facts when they are made clear.

If the public utility commissions of the various states make this type of investigation, it will permanently increase their work. Such investigation will require the commissions to keep intimately and currently in touch with the operations of the utility companies. It will necessitate continuous research into the operations of each company under a commission's regulation and a continuous study of valuations.

Due to changes in modern methods of living, such as the use of the radio and a much wider reading of the newspapers and magazines, the whole manner of life has speeded up. Where it used to take months and sometimes years for an idea to percolate through a large group of people scattered throughout a state, now sometimes only a few weeks are required for the same process. This change is reflected in the views of many sections that action on rate changes for public utilities should be quick to respond to the public need. Many of us are familiar with rate case hearings that have taken months and sometimes a year or more to be presented to the Commission. This, obviously, does not meet the present ideas of the public. One of the new fundamentals, then, of rate control is to develop a method that will get speedy action on questions that heretofore have taken a long time.

#### *Strong Utilities Needed*

Because of the more active interest on the part of the public and sometimes of political agitation, many people have gotten a very fragmentary idea of the method of establishing rates. Up to a few years ago, the intricate steps in a rate case were understood by only a few people outside of the members of the commissions and the representatives of

the utilities. Many people now have heard about a "rate base" and have a hazy idea that it is a fundamental part of the problem of fair rates. They do not know what the "rate base" is. Generally the idea prevails that it is the value of a physical property. Not infrequently the belief is met that this value can be changed from month to month by the application of some general index of price levels such as are issued by many of the business magazines and some of the governmental agencies.

To many people, the valuation of a utility property seems just as simple as the determination of the price an individual will pay for his home. Even so-called experts have blossomed forth with extremely simple methods of property valuation. All of this is due to the fact that there is only a partial knowledge on the part of the public of the variety and dissimilarity of the items composing a rate base. This misunderstanding, on the part of the public, is due not only to the very technical way in which these cases have been handled in the past, but that as a whole, the decisions of the Commissions have been almost as technical; so that another fundamental of modern rate making is that rate decisions, in their final analysis must be stated in language that the average business man will have a chance to understand.

The public is beginning to appreciate that these rate cases carried on before commissions in an ordinary and normal way are extremely expensive. They do not, however, understand why they are expensive. Because of the same misunderstanding as to the variety and the extent of the items involved, they do not again understand that all of the cost of a rate hearing both on the part of the company and the public is borne ultimately by the rate payer, as this is the only source of income for the public utility company. As these cases sometimes cost hundreds of thousands of dollars, it is again fundamental that, if there is any way to adjust rates without this extremely expensive process, quite frequently the saving of this expensive trial will in itself provide a substantial decrease in rates.

In any community which is growing industrially, and all communities expect to grow industrially, it is extremely important that the local utility be ready

and willing and able on a moment's notice to give to industry, either now existent or contemplated, the necessary power extensions in lines and in equipment to serve this industry. Nothing will give an industrial community the black eye quicker than the fact that its utility source is weak and cannot expand with industry. Nothing is a stronger boost for a community seeking industries than the statement that its utility is strong, well managed, and adequately financed to take care of all of their needs. An appreciation of this fact on the part of the business men in a community might possibly change their attitude toward the operation of their power company.

Another factor of fundamental importance to the public is that of the continuity of service. The grade of service is likewise of the utmost importance. Many companies that are well managed have in recent years spent hundreds of thousands of dollars for better regulating equipment and alternate sources of supply, which have not added a single dollar to their revenue. The investment of these dollars has, however, provided for the manufacturer a better grade of service. This factor of the grade of service should unquestionably be one of the facts brought squarely to the attention of the public.

#### *Good Service Imperative*

What good is a low rate to a manufacturer running a loom, for instance, if the frequency of the current is such that his loom is irregular in operation and ruins his product, or if his lines are such that the current is frequently interrupted? No matter how low the rate might be, it would be entirely unsatisfactory for him.

It should, and possibly is, generally understood that a utility company to be of maximum service to a community must be sound financially, and making a sufficient profit to attract new capital. In Virginia several years ago the electric company which served two of the State's larger cities, which are located approximately 50 miles apart, was unable to finance the construction of a transmission line between these two cities. The result was that in one of these two cities, where the generating facilities of the company were limited, the industrial growth was stunted. New

industries which would have added materially to the payrolls going to residents of that community were discouraged when considering the location of their plants there. Is a better illustration of the necessity for the maintenance of the ability of a public service corporation to finance its growth needed to picture this fact to the public?

Many rate payers are, at the same time, owners of the securities of the companies by which they are served. Most commissions, of course, are obligated to protect these owners of the utility properties as well as the rate payers even though the individuals themselves fail to recognize their dual interests. Only recently in Virginia the residents of a small community, where much of the stock of the public service corporation serving this area is owned, voted to refuse the renewal of the franchise of the corporation and to construct a municipal plant. In a similar instance the California Railroad Commission recently very wisely pointed out the ultimate effect upon the operations of widely flung electric utility systems of such disintegration. Probably it is not the function of a commission to advise a community contemplating municipal ownership of the ultimate effects under normal circumstances. It does not seem unwise, however, for a commission to bring to the attention of the public the commission's obligation of protecting both property owners and rate payers alike.

These are some of the factors which, if understood by the public, would result in a material change in the present tenor of public opinion. But how, you will ask, are these facts to be disseminated to the public?

There is now no way to obviate the possibility of a long drawn out rate case. Every man has a right to his day in court if he feels that he is being injured. Hence, a fundamental rate hearing with all its technicalities, and the presentation of a confusing mass of evidence may, at times, be absolutely necessary. There are, however, methods now developed or being developed that substantially decrease the need for this type of expensive and time-wasting hearing. Many of the commissions have experimented with such methods in the last few years of the depression. Some of them seem to be entirely inadequate; others may

represent the development of effective and expedient processes for the determination of rates and the engendering of better relations between the public, the commissions and the public service corporations.

#### *Satisfactory Investigation*

Some months ago, the Virginia State Corporation Commission, after months of careful study, devised a program for the investigation of the rates charged by the three major electric utility companies in this state, serving approximately 95 per cent of all the electric consumers. After patiently planning its study, the Commission employed an outside engineering firm of wide experience and instructed this firm to proceed along certain well-defined paths. As yet the complete study authorized by the Commission has not been made. The results so far obtained, however, have been so satisfactory that I will briefly describe the essentials of this investigation for your consideration.

In its letter of instructions to the engineers retained, the Commission wrote in part:

"We realize that with the money and time available for this investigation it will not be possible to make a thorough appraisal of the valuations of these three companies. However, we desire you to make a careful inspection of all properties of each company, to determine what properties are not now used nor useful, and to make a sufficient check of the valuations of all properties as will permit a reasonable determination of the values today of these properties.

"We will expect you also to make detailed and careful analyses of the revenue derived by each company from the sale of electric current. These analyses are not only to be designed to insure that the revenues of each company are fully stated. They should also reflect the policies of each company with respect to rate reductions instituted during recent years and as to the promotion of the use of electric current.

"We will expect you, still further, to make thorough examination of the operating expenses of each company, and to ascertain definitely the fairness of the stated expenses. These examinations should further reveal the

management policies of each company, the nature of the organization of each corporation, the burden of overhead carried by each company, the burden of taxation included in the operating expenses and the net effect of the holding company relationships of each company.

"In reporting the results of your study to us, it is understood that you will present the findings in as simple and intelligible a form as possible in order that the methods by which you arrive at your conclusions and the conclusions themselves may be understandable to the average electric rate payer. It seems to us that this end may be gained, to some extent, by rendering separate reports as to the operations of each company. These reports should be further subdivided, it would seem, so as to present the essential facts relative to electric rates and service in each of the state's major communities separately so that each individual rate payer may know as much as possible about the service and the rates charged in his own community."

In making its study the engineering firm that has been retained has made extensive comparative studies of electric rates for various classes of service in Virginia with similar rates charged in other states. These have been presented in simple intelligible fashion for public consumption along with other essential facts incident to the determination of rates.

This very brief description of certain major considerations taken into account in the Virginia investigation gives only a cursory picture of the methods employed and the subject matter covered. It does, however, indicate the nature of the process used to arrive at an effective, expedient, and economical determination of the fairness of electric rates in this State. It indicates also, to some extent, the manner in which an effort has been made to educate the rate payer in the essentials which go into the determination of rates. "The whole truth and nothing but the truth" concerning the operation of each of these Virginia companies has been broken down into the simplest fragments and prescribed for the remedying of a formerly ailing public opinion. The question may arise in your mind whether this could be

done without antagonizing the utility operators. It can and has been done in Virginia, because the managements of the companies that have been dealt with have recognized the necessity of good public relations, the present tenor of public opinion, and the determination of the commission to ascertain the facts. Upon the completion of the study of each company, the investigators, members of the commission, and representatives of the company, sit down around a table and thoroughly discuss all results of the investigation. These discussions have been frank and full, and have resulted in the intelligent reduction of rates in those cases where the investigation has so far been completed.

#### *Thread of Common Purpose*

State regulatory commissions were born of the public dissatisfaction with the rates and practices of public service corporations. Basically, whether we like it or not, the commissions have as an essential function the appeasing of this public dissatisfaction. The only way this can be done is to acquaint the public with the methods and facts by which rates are determined, and to display for the public efficient, expedient, and economical processes of determination. The Virginia plan, while it has not finally been weighed, to date has demonstrated remarkable potentialities.

Our friends from other countries, where regulatory processes are so different, may wonder at our plan of fifty-one commissions with widely varying powers, jurisdictions, and responsibilities. However, as the United States, because of its size and wide dissimilarity of climate, living conditions, natural resources, and productivity, offers an example of the largest free-trade area in the world, so does our system of regulation by the states and territories fit both the temper of our people and the varying conditions of utility operation. It would be impossible to attempt regulation of many thousands of operating units, over such enormous territory and under such widely differing conditions, with any degree of economy or efficiency through any central governmental agency.

Proof that the thread of common purpose does run through the entire

operation of state control is evident in the activities of the National Association of Railroad and Utilities Commissioners. The committees of that body, from the different states, are constantly at work, and the discussions of the best treatment of the problems of regulation flow on, like Tennyson's Brook, forever. And yet the reports of these committees, and the discussions that center around the ever changing facets of public utility evolution, show a surprising unanimity in the approach to and solution of these questions throughout the Union.

Now, in conclusion, I wish to assert that it is the business of government to provide an open road for the exercise of the individual initiative of its citizens, not to substitute its own activities for that initiative, and to see that free opportunity is given for the economic production of wealth, not to produce wealth itself. That government is the wisest which does not attempt to perform those functions which more localized agencies, governmental or otherwise, can perform for themselves. It is the business of the government to regulate and control, not to manage and operate. All business needs a lifting purpose greater than the struggle of materialism, but this does not lie in some visionary and emotional crusade. It lies in the higher pitch of economic life and a finer regard for the rights of others, through the organization of all the tools of our economic life so that they may produce happier individual lives, more secure in employment, wider in possibilities of comfort and enjoyment, and larger in the possibilities of intellectual life.

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#### Howard H. Newman Dies at Summer Home

HOWARD H. NEWMAN, former president of the New Jersey Gas Association and a member of the American Gas Association, died suddenly August 26 at his summer home, near Point Pleasant, N. J. Mr. Newman was formerly district manager of the Public Service Electric and Gas Corp., at Trenton, and later served as division agent at Elizabeth. Before leaving Trenton, in 1926, Mr. Newman took an active part in fraternal, civic and church affairs. The funeral took place at his home in Elizabeth.

# Gas Industry Planning For Greater Sales\*



Conrad N. Lauer

ANY consideration of plans for greater sales, whether they be plans for the individual company or for the industry as a whole, must necessarily begin with more general survey of what has happened to the gas industry during the recent years of the worst depression it has had to face and must include some interpretation of these experiences for our guidance in meeting the problems and opportunities that the present and near future affords.

Our customer list at the end of the year 1929 totaled fifteen million for both branches of the industry and thereafter reached its peak of sixteen million during the year 1931, and now stands at fifteen and one-half million, a reduction of 3 per cent from the peak figure.

The industry's total sales of gas reached its peak in 1930 when 1,355,000,000 M cu.ft. were sold, and declined to 1,202,000,000 M cu.ft. at the end of 1932, a reduction of about 11 per cent.

Revenues derived from gas sales reached their peak of \$797,000,000 in 1930 and the year 1932 closed with a revenue of \$724,000,000, a reduction of about nine per cent. Thus it will be seen that our greatest losses in customers, in sales of gas, and revenues occurred during the year 1932.

The manner and extent to which the gas industry has withstood the problems of the business depression and the competition which it has experienced during the past three years are favorable and encouraging and fully demonstrate the vital position which we occupy as a basic industry.

The stability which has been shown by domestic sales emphasizes the neces-

By Conrad N. Lauer

Chairman, National Directing Committee of Executives, American Gas Association

sity of not overlooking the importance of this class of business as a backbone of the industry when planning for the future. The peak of domestic and house heating sales revenues occurred in 1930 and these revenues now stand barely 4 per cent less than at that time, while industrial, commercial and miscellaneous revenues have dropped approximately 20 per cent from their 1929 high. The reduction in domestic revenues for the natural gas branch of the industry is substantially the same as that for the manufactured gas branch, proving that there is no differentiation in the desirability of this business as a sustaining load.

Almost any business, other than ours, which had maintained its services to the general public to the same extent as we have in the domestic field would properly feel greatly reassured in laying out its future sales plans under the conditions that are now looming up on the business horizon. In our own case, however, I think you will agree that this record is not a measure of either the problems or the opportunities that we face in gaining the desired development of our domestic business in the future. With an average of nearly fifteen million customers on our lines during the entire year, the sale of gas ranges dropped from approximately one and a half millions in 1929 to 600,000 in 1932. Literally millions of our customers who, if times had been better, would have purchased thoroughly modern gas ranges, have had to forego these purchases and through the force of circumstances use their present ranges, most of which are not representative of the superlative service that gas can render for cooking. Every one of these customers, upon the return of purchasing power, constitutes an open door to competitive approach and by the same token requires a

prompt, vigorous and aggressive sales attack by the gas industry if the cooking load is to be protected against competitive inroads.

#### Water Heater Sales Drop

To aid the industry in protecting and developing its cooking load, the National Directing Committee of Executives, of which I am Chairman, last June recommended to our Executive Board that an appropriation be provided to finance research work at the American Gas Association Laboratory on automatic lighting and safety features of gas ranges. Substantial progress has been made on this project and the Special Committee which has supervised this work is meeting during this Convention to review the final results of this project. Unquestionably this activity will be a material aid in the perfection of automatic ignition features for gas ranges, and will assist in promoting the sale and use of more modern types of gas cooking appliances.

While statistics are not available covering the water heating sales, it is a known fact that the sale of automatic water heaters has been curtailed severely and that the former tendency to replacement of tank heaters with automatic types has shown a marked reduction in many communities.

In manufactured gas territories the annual increase in number of house heating customers has fallen from 20 per cent in 1929 to 3 per cent during the year 1932. This slowing up of new house heating business may be attributed largely to the disruption in the price of competing fuels in the last stages of the depression, leaving our rate structures out of line with those of our competitors who were experiencing cut-throat competition among themselves.

Many companies have analyzed their sales records exhaustively in the light of their local competition and as a result we see today in numerous localities a greater interest in the replace-

\*Address before General Session, A.G.A. Convention, Chicago, Ill., Sept. 27, 1933.

ment of customers' equipment through kitchen planning and modernization movements and inducement or promotional rates aimed not only to hold their present water heating and house heating business, but to extend these sales into new income and market classes. No better example of a concerted and cooperative plan to advance house heating sales could be found than the present campaign of the three companies in the Chicago area to put gas heat into 60,000 metropolitan Chicago homes during the next eighteen months, and no more encouraging proof could be found of the success that attends careful planning than the results of this campaign during the first six weeks when more than 9,000 jobs were sold at the rate of 200 a day, which is double the quota set.

The scale upon which this plan has been conceived and launched is a tribute to the sense of responsibility that the several company executives have for sales development in their properties, and the success to date is a subject of congratulations for those in charge of the administration of the campaign. This is unquestionably the biggest coordinated and cooperative selling campaign that has ever been put on by the gas industry, and I know that every one of you will be interested in full details, which will be given at this afternoon's Commercial Section meeting by Mr. Paul A. Jenkins, Promotion and Advertising Director of the Campaign. Other outstanding cooperative examples are the coordinated advertising and sales campaigns now in progress in the metropolitan Boston District, in Pittsburgh, and in Southern California.

#### *Cooperation with NRA*

The gas industry, like all others, has recently been engaged in intensive activities to determine its place in the structure of the National Recovery Act program. Undoubtedly the observance of this program will result in higher operating costs, but the industry as a whole has accepted the plan to help bring about national recovery in the same spirit and with the same measure of cooperation as it has displayed for every other movement for this purpose during the last four years. We must all believe in the success of the pro-

gram and strive to bring about the desired results and realize that if it is successful it will result in tangible benefits to our industry by increasing our business through restoration of the purchasing power of the public. We must also remember that to the extent it is successful in eliminating the cut-throat competition that has been so prevalent and troublesome to us from competitive fuels, our own prospects for developing sales in competition with these fuels will be improved.

If our efforts are to be purely defensive in the future as they have frequently been in the past, they can never be profitable, for it is well to bear in mind that any purely defensive activity must of necessity be paid for out of present revenues, while those designated to attach new business, if correctly conceived, will be more than covered by the business gained.

It is evident that the battlefield for business in the future will be more than ever between industries competing for the customer's dollar, rather than between competing units of the same industry, and it becomes increasingly apparent that we must prepare to forge ahead as a united industry if we expect to enjoy the growth which the gas industry deserves.

More than a year ago a special committee was created by the Executive Board of the Association which was clothed with the duty of outlining a sales development plan for the gas industry and with the especial obligation to use every influence to see to it that the agreed upon plans should be, in so far as practical, put into operation by each gas company member of the Association. The officers and members of this committee, representative of all branches of the industry, have sought the guidance and council of the best talent both within and without the industry in the preparation of the program which it was instructed to formulate. Representing the committee, it was my privilege to present the program at the meeting of the Executive Conference of the American Gas Association here in Chicago last June. The program submitted was unanimously adopted by the conference, and subsequently approved by the Executive Board, with instructions that the committee formu-

late a plan for financing the national advertising part of this program.

#### *Flexible Program*

Delegates of member companies of the Association have already received copies of this program, which is a balanced one, for national and local sales promotional and advertising activities. For this reason I will not go into the details of it except to say that it represents the best thought available, both within and without the industry, of a practical, flexible and effective program for promoting the sale of gas and gas appliances for cooking, water heating, refrigeration, and home heating purposes.

A great majority of activities recommended in this program are those intended for local company administration and these are supplemented by a national advertising and publicity program of modest proportions for the purpose of enhancing the effectiveness of the local activities and giving a unity to the industry's sales attack that it could not otherwise have.

Since the approval of the program by the Executive Conference and Executive Board, your committee has held numerous discussions with representative gas company and manufacturer executives to the end that a plan for financing the national advertising part of the program might be developed which would meet with the approval of the majority of these groups.

At a meeting of the committee held during this Convention, we agreed upon a financing proposal which will finance the campaign upon an equitable basis to all parties, and make it equally successful in promoting the sale of gas and modern gas appliances in the domestic field.

The program requires the full cooperation of appliance manufacturers and gas utilities and other appliance outlets for the maximum success, and the method of financing calls for full cooperation by these several groups at the outset in underwriting the program.

As instructed, on behalf of the Committee, I submitted this proposed plan for financing to the Executive Board at its meeting held on Monday afternoon.

(Continued on page 442)

# Executive Responsibility For Sales Promotion\*

THE history of the gas industry is replete with stories of genius and of achievements. There is no industry in the world today with a longer or finer record of continuous progress. The economic storms of fifteen major depressions have been successfully passed. The challenge of competition, threats of financial disaster, and the assaults of politics have been met and with each meeting the industry has advanced. The intelligence of this industry has always distinguished itself as an aggressive and virile intelligence. There is in the fact of a splendid gas service available to millions of families, a testimonial and a monument to the earnestness and efficiency of the men of this industry.

Our greatest weakness is that we have done a job so well that it has become a commonplace in the lives of the people. Service failures are unheard of and even the annoyance of delays or inadequacy has been overcome until there exists a dependability that is taken for granted as involving little of investment or expense in maintaining its habitual monotony. We have all met the type of customer who was not so far gone with prejudice as to permit a talking over of the facts of our operations, who was astonished when these were explained to him. It is not infrequent that we may meet a public official who will admit the values of our service but add that he dares not assume a favorable attitude for political reasons.

It is not enough for us to provide good service, but we must have it recognized for good service and have it appreciated at its real value if we are to have the opportunity to maintain and carry on. This value is not recognized because we, as an industry, have failed to give effective attention to the very important element of human nature as it affects our companies. When we deal in matters of public

By E. M. Tharp

Vice-President, The Ohio Fuel Gas Co.

sentiment or opinion, it is not so much a question of what the facts actually are as what the public thinks the facts are. It is not wholly a question of what conditions are, but also of what they appear to be. Sir Josiah Stamp, a wise economist, said, "Integrally, what people think about facts, however wrong and misguided, is very often to be included in economic data and is very often more important in the long run than the study of things as they are. People will run as fast from a dog, if they think it is a wolf, as they would if it were actually a wolf, and if people have a misconceived notion of economic facts, that is just as important in economic data as the facts themselves."

Those who for political or other reasons have developed opposition to the best interests of the gas industry, have been able to attract attention, to create agitation and to secure votes. They have been able to do this because they formulated a definite message. They have seen to it that this message was of personal interest to the public and they have carried out a vigorous and systematic program of placing this message before the public.

#### *Human Element Improved*

Until very recent years the dominating problems of the industry were financial and engineering and called for an exact-minded type of leadership that reasoned from cold facts and followed a technology unrelated to the vagaries of human nature. Since the public has come to manifest discontent and misconception of the purposes and values of the service, the effort has been made to meet this situation with rationalized exactitude and to set up a public relations machinery as a feature of the business. Volumes of reports, covering every phase and application of the public relations idea, have been presented at these conven-

tions. Employees have been schooled in customer contacts, in being considerate and helpful and pleasant. All of this has served to improve the human element in the service and has been effective in creating a more favorable impression of the gas company organization. There has been nothing done in the development of our industry of a more essential character.

While some of this so-called public relations work may have been initiated as a means to an end, a sort of uniform to be worn in our business, it has revealed and proved itself a better way to operate. After all, good public relations practices are just good business methods, just being human in our business. A credit man, on a property where these methods were being introduced, approached his manager with much perturbation as to what he should do in the case of an influential customer whose account was delinquent. The credit man was asked what he would do in the case of any other customer's delinquency and answered that he would discontinue his service. When the suggestion was made that he should do the same in this case, he replied that he thought it might be a violation of the company's public relations policies. It was explained to him then that the whole affair was simply a matter of methods. If it is done with proper regard for the customer's vanities and feeling, there will seldom be any unfriendly reactions and the customer will not only strive to pay up the account, but also to renew the service.

Certainly, no one in this modern day of emphasis on the human side of business would want to operate by any than the best public relations practices. But a sweet-voiced telephone girl and a sympathetic turn-off man, while they are essential, will not of themselves alone turn aside the attacks now being made on this industry. The gas user has been given these improved company contacts and the excellent physical service facilities as a

\*Address before The International Gas Conference and Fifteenth Annual Convention of the American Gas Association, Chicago, Ill., September 27, 1933.

matter of course, without ceremony, without explanation, without salesmanship. He has accepted them as they were proffered, as a part of that which he paid for, and has been willing to embrace the idea that he paid too much.

The only persons who have been discussing this question of the value of gas service in the language of the consumer are the politicians. We all know that what they have said about it has done us no good. Whenever we have taken occasion to meet this situation, we have followed one of two courses of action; either we talked a lot about our investments and costs, about depreciation and amortization, or we proceeded into litigation. The more we have proceeded in either of these two courses, the more misunderstood we became.

Talking to gas users about the vast extent of plant and equipment, the huge investments, the tremendous costs, does not interest him much more than discussing the Einstein theory with him. The more we talk about costs, the more he is inclined to talk about costs, but they are not the same costs, and only serve to aggravate a negative attitude. Have you ever read any consumer literature about soap or shoes or socks or underwear that discussed costs? Do the coal dealers talk about costs? If they do, they are gas costs.

#### *Dealing With People*

The gas industry has done and is doing itself more damage by overlooking or disregarding the merchandising phases of its business than all the politicians in America have done. Before and after any of us are producers, engineers, lawyers, accountants or just plain gas men, we are consumers and if we would take a leaf out of our own experience, we would know that basically the consumer demands the compliment of being sold. The human being in his capacity as a consumer is the unknown factor in our economic speculations. He does not yield himself to exact science or legal form or statistical calculation. He makes possible the volume production of one automobile one year and another the next. He is a Republican one time and a Democrat another. He is both reasonable and emotional; he

is both thrifty and extravagant. He is not interested in understanding us. He demands that we understand him.

The most complicated problems we have to deal with are people—human beings. Our success or failure in the gas industry depends less upon plant and equipment than upon human equations. When we have an investment of twenty thousand dollars to make in some feature of the plant, experts are called into conference, plans are drafted and redrafted and blue-printed and analyzed and studied. We deliberate and revise at great length before we proceed. When we have to employ a man for \$100 a month, applicants are received, interviewed without much care, and the job assigned. This proposition is not scrutinized or planned or studied, and yet it is equivalent in every respect to the twenty thousand dollars' investment, since one hundred dollars a month is equal to six per cent on that sum. If we will appraise our payrolls on that basis, it will be found there is as much investment in this human element as there is in the physical plant. Is there any reason that justifies the painstaking care by which we dispose of a matter of physical investment that does not apply to the human investment? One carelessly employed and poorly trained man can do more expensive damage than a major plant failure.

Practically all of the difficulties and forebodings affecting the gas industry today result from a disregard or misconception of humanics. The human factors in our own organizations have not been given the development of incentive essential to their full effectiveness. The vagaries of human nature in our customers have been entirely misunderstood or neglected. These same human elements are the foundation upon which the merchant builds his business. Any individual or concern dealing in the supply of a service or commodity to the public is in a broad sense a merchant. While we are, in every human respect, of this group and subject to this classification, we have not conducted ourselves as merchants or apparently had any of the instincts of a merchant. This is manifested in our obvious failure to merchandise our business to the public.

Many of us confuse merchandising with selling. It is for this reason that we have attempted to meet this situation and solve this problem by the introduction of sales departments. But load-building activities do not meet the requirements of merchandising in the gas industry. Usually, such a department, if successful, will contribute further to the general misunderstanding, because the more it increases the customer's gas bill the more insistent will he become that there is something wrong with the cost of gas. Load-building, and load-holding sales activities are essential, but they should harmonize with and be a part of a general merchandising attitude and operation. The real merchandise of a gas company is gas and the basic sales policy of a gas company must be developed around a consistent, all inclusive and persistent selling of the advantages, the efficiency, the economy, the value of that product.

#### *A Sizeable Job*

The merchandising idea as it relates to and affects our business cannot be departmentalized or subdivided or put on as a secondary activity. Merchandising, as distinct from selling, is selling in the mass. It contemplates the entire operation from financing, production or acquisition of the goods, through the operation of warehousing, displaying, advertising, selling, delivering, accounting, credits and collections. It is a sizeable and very responsible job.

Selling is but a feature of merchandising. The merchant mind contemplates the broad scope of the operation and all of its objectives. Selling is but the individual persuasion of another to do what you want him to do. When we approach this problem merely as a selling operation, we approach it inadequately. This approach accounts for some of the difficulties we have encountered in our dealer relationships. In making concessions to the salesman's insistence that the prospect's resistance had to be overcome by something other than a selling method, we have yielded to price making that was inconsistent with and harmful to the dealers' pricing methods. We departed from merchandising when we did this and became bargainers. We helped the sales-

men to a volume record, but we cheapened our business with the result that we gained the condemnation of the dealer and only a temporary satisfaction in the mind of the customer. Sales resistance is essential to selling that stays sold. The application of the merchandising principles in our business involves the aggressiveness, skill and teamwork of our organizations just as the engineering principles are concerned with the condition and efficiency of the mechanical equipment of our companies.

The application of good merchandising practices gives the management an invaluable contact with employees and with the public and is essential in clarifying the policies of the company. We all recognize how vital it is in establishing general policies to know exactly the necessary tasks required and the best methods of accomplishment. Merchandising methods require that certain fundamental things be done, such as organization training, employee education, and the inspection of organization results, and such methods compensate in by-products or secondary benefits of tremendous advantage to all departments of the business.

The rates which we receive for gas in the future, more than in the past, will be based upon the popular conception of the value of gas. Are we going to leave the statement, the publicizing of that value, to the politicians? The rate regulating methods in vogue in most of the states are responsible largely for the neglect of the public and of merchandising methods in the settlement of rate matters. With apparent rights and definite facts and figures, we have taken refuge in the commissions and courts and in sustaining our position before these tribunals, we have created a basis for further suspicion and dissatisfaction with which the politician might agitate the public. When a rate is questioned, getting a decision sustaining it does not convince anyone but the lawyers. Unless we sustain our rights in the customer's mind, the same as the merchant sustains the value of his merchandise, we have not sustained them at all.

#### *Must Begin at Home*

Too many of us think that the business of selling the public is so tremendous as to approach the impossible

and yet we have witnessed within the last few months the public accept, with loud cheers and ballyhoo, some of the most revolutionary political and economic ideas ever introduced to our country. We have seen great names come and go in the political firmament; we have seen brand names and labels developed into tremendous public acceptance; we recognize the methods by which these achievements in public acceptance were accomplished, and yet we quail before the task of selling the public. The fact that we appeal confidently to court or commission is a manifestation of the confidence which we have in the facts of our business. Does any man believe that the public in the mass is any less reasonable or fair when the testimony of the business is properly presented than the personnel of our courts and commissions, the children of the same mass mind?

How may this job be done? We have the methods of successful politicians from which we may adapt; we have the methods of successful manufacturers from which we may choose; we have the methods of great merchandisers which we may emulate. We must begin with ourselves, with a faith in our proposition, in our product, in our ability. We must begin with the training in these methods of the entire personnel of our organization.

The introduction of employee sales education and activity is one of the most effective mediums of carrying the sales idea into all departments of the organization. It gives the employee a finer appreciation of the purposes of the company and by making him a participant outside the circumscribed duties of his department, improves his loyalty and efficiency. In our own company, the employees have been responsible for fifty-three per cent of total appliance and equipment sales this year and we have several times exceeded the best previous months in our appliance selling experience.

Employee selling in our company is not subject to sales department stimulus or supervision. It is part of the regular department activity and is a matter of constant coaching and reporting under the foreman or manager. The program is planned by the personnel department, working with the sales department, and is carried through

by scheduled group meetings followed by informative and stimulating bulletins and other literature down lines of authority. Aside from a single campaign each year in the early fall, when employees complete sales of space heaters, it has not been our practice to pay commissions. The third of these campaigns is now under way. The two previous campaigns resulted in the sale of approximately six thousand heaters. Seventy per cent of our heating load is from space heaters.

An essential background for employee selling is employee selection and training, since a large percentage of human beings have no aptitude or personality for salesmanship. The type of employee desirable for customer contact work is the type that may develop sales ability. Our personnel department began a program of selection and schooling several years ago that has proved itself effective as a foundation for a high percentage of employee participation in sales activities. This same program is responsible for the personnel of the sales department itself. Meter readers, collectors, service men, have been developed into salesmen of a highly successful type.

An important part of the employee sales training is our value of gas school where the employee learns to express the value of gas in terms of the customer's use. For employee training, as for sales demonstrations to customers, the story is picturized by means of film projections.

Value of gas is being sold by these personal contacts of employees, combined with newspaper advertising, radio broadcasting, and by means of a miniature newspaper issued monthly by the company and distributed by the meter readers. The effectiveness of these methods and media is checked by home survey work done under the supervision of the Home Service Department.

#### *New Era Ahead*

Most convincing of the evidences of effectiveness is the large number of rate ordinances negotiated through a period of distressing political and economic conditions. The result was somewhat better than just maintaining a rate level. These negotiations were featured with selling to the public in the cities and towns involved, the fact

that gas service at the rates proposed was worth more than was asked for it. The cost of refrigeration, cooking, water heating, space heating and house heating at the rates proposed was compared with the costs of using other fuels for these purposes and the savings designated as dividends to the customers. When you capitalize cleanliness, convenience and the other obvious advantages of good gas service, it is a simple proposition to show the customer that his savings are greater than the earnings of the company. This puts the transaction on the sound basis of mutual profit. It is the selling method, the method used by the merchandiser, the automobile dealer, the shoe man and the grocer.

When we sell gas for industrial purposes, we follow this method of evaluating the fuel service in terms of competitive fuel and form costs. In our own case, this method has effectively held and developed our industrial load which now averages for the year, five per cent over the 1929 average sendout. If it is a sound method for industrial customers, why isn't it a sound method for domestic business?

We are confronted with the necessity of adopting a new philosophy—a sales philosophy. It may be said that the gas industry is entering upon a new phase of its history and development. Managements that do not become sales minded will only multiply the troubles of the industry. Our entire organizations and operations must be sales colored. This composite sales attitude cannot be accomplished by employing a sales manager and setting him in a resplendent office and telling him to sell. Sales mindedness must originate at the top to be effective. It involves an understanding of human nature and selling strategy and requires a sense of proportion and consistency for the more intangible activities and expenses involved in selling. A management that shies at spending some thousands of dollars in sales and advertising work, because it cannot measure the exact result in advance, is not a sales-minded management. Such a management could fail to spend some thousands of dollars for sales and advertising and then pay in revenue losses and litigation expense fifty times the cost. One of the out-

standing and essential capacities of a merchandise mind is the ability to appraise the intangibles of selling operations.

When we take the attitude of constitutional rights out of the picture; when we stop being defensive; when we quit arguing matters of cost and investment with politicians; when we eliminate these things and substitute for them employee selling contacts with customers, and a liberal use of service literature and newspaper advertising, we will replace political attack with customer confidence and support. The politician is on our neck because we have allowed it to be a comfortable place for him. Getting him off is not a day's job or a month's or even a year's. It is a proposition of consistent persistence.

Revamping such a picture as we

have before us calls for the stuff of which a pioneer and a fighter is made. There is nothing in the method that can ever be discredited as propaganda. There is nothing unfair or misleading in such a program. The customer gets good service, but it is labeled; he is given every consideration that will improve his satisfaction but is persuaded that it is appreciation of his patronage; he is advised of the company's purposes and policies in terms of his interests and benefits; he is made conscious of the service, convinced of the value; he is treated as a prospect, a patron, a buyer.

The gas industry is on the threshold of a new era, if it accepts the challenge of merchandising. It totters at the edge of a precipice of grave difficulties and uncertainties if it denies this challenge.

## Selah S. Tomkins Is Honored with Beal Medal at Chicago

**S**ELAH S. TOMKINS, assistant chief chemist of the Consolidated Gas Company, New York, N. Y., received one of the outstanding honors within the gift of the American Gas Association when he was presented with the Beal Medal at the annual convention in Chicago, September 28. The presentation to Mr. Tomkins was made by E. R. Acker, president of the Central Hudson Gas & Electric Corp., Poughkeepsie, N. Y., acting in behalf of the family of the late W. R. Beal, who first offered the medal in 1897 for the best technical paper presented at association meetings.

Mr. Tomkins' paper on "Gas Detection Instruments," presented before the association's Technical Section a year ago, won for him this recognition. The Beal Medal Committee was unanimous in recommending to the American Gas Association Executive Board that this year's award go to Mr.

Tomkins. Members of this committee are as follows: I. K. Peck, Midland United Company, Chicago, chairman; J. A. Perry, The United Gas Improvement Company, Philadelphia, Pa., and O. S. Hagerman, American Light and Traction Company, Chicago.

This award consists of a gold medal and financial recognition, and has been sparingly bestowed. The list of those who have received the medal in the past contains the names of men well-known as leaders in the gas industry. Following are those

who have received the medal:

Henry L. Doherty, Arthur Glasgow, I. N. Knapp, B. H. Spangenberg, Henry L. Rice, W. H. Gartley, W. H. Fulweiler, C. J. Ramsburg, H. W. Alrich, L. E. Worthing, C. O. Bond, O. B. Evans, F. E. Steere, E. J. Brady, F. W. Sperr, Jr., Arthur W. Warner, Ralph L. Brown, L. J. Willien, Louis Stein, Philip Thornton Dashiell and R. B. Harper.



*Selah S. Tomkins and Beal Medal conferred upon him at Convention*

## ACCOUNTING SECTION

E. B. NUTT, Chairman

H. W. HARTMAN, Secretary

A. S. CORSON, Vice-Chairman

## Summary of Accounting Section Sessions at Annual Convention

THE annual meeting of the Accounting Section, which was held at the Hotel Stevens, Chicago, September 26 and 27, ended one of the most successful and productive years the Section has experienced. The reports submitted by the committees contained much interesting and valuable material, as was evidenced by the discussion which followed each presentation.

J. M. Roberts, of The Peoples Gas Light and Coke Company, Chicago, chairman of the Section, presided at the meetings. Following Chairman Roberts' opening address, B. J. Mullaney, vice-president of The Peoples Gas Light and Coke Company, welcomed the accounting delegates to Chicago. Mr. Mullaney stressed the responsibility of the accountant from the customer relations viewpoint and urged that further attention be given to simplifying customers' bills.

W. A. Doering, chairman of the Nominating Committee, submitted the names of the following nominees for the 1933-34 Association year: For chairman, E. B. Nutt, Hope Natural Gas Company, Pittsburgh, Pa.; for vice-chairman, A. S. Corson, United Gas Improvement Company, Philadelphia, Pa. These nominees were unanimously elected.

The first report to be presented was that of the Customers' Relations Committee, H. E. Ehrmann, Midland United Company, Chicago, chairman. This report consisted of two subcommittee presentations. The first, entitled "Improving Customers' Relations through Bill Investigations," prepared by F. L. Hallock, of New York, summarized the causes of bill investigations and the experiences of a well-trained customers' service department in handling such cases. The report was presented by F. E. Vilas in the absence of Mr. Hallock.

The second report of the Customers' Relations Committee, "Information on Customers' Orders," was presented by Jay Barton, of Chicago. This report presented in a convincing manner the practices that twenty-two companies follow in their endeavor to furnish shop men with accurate and complete information on the principal types of orders.

The next item on the program was an address by Ray Garrett, of Cooke, Sullivan and Ricks, Chicago, entitled "Pending Legislation Concerning Utilities," summarizing the trend of recent state and national legislation.

The General Accounting Committee, M. F. Reeder, of Chicago, chairman, presented

By Herbert E. Cliff

Public Service Electric and Gas Co.

two subcommittee reports—"Internal Auditing Controls," by E. R. Rotramel, which outlined the organization and procedure for internal audits; and "Preservation and Destruction of Records," by F. R. Saunders, Philadelphia Company, Pittsburgh, Pa.

As a part of the General Accounting Committee presentation, L. L. Dyer, of Dallas, Texas, discussed the accounting problems of the natural gas companies, with particular reference to capital costs.

The final presentation of the Tuesday afternoon session was that of the Customers' Accounting Committee, H. B. Bearden, chairman. Mr. Bearden reported progress on the efforts of his committee to obtain sufficient data to furnish a yardstick for measuring the efficiency of customers' accounting systems.

The Wednesday afternoon session opened with the report of the Uniform Classification of Accounts Committee, H. M. Brundage, Consolidated Gas Company of New York, chairman. In Mr. Brundage's absence, H. C. Davidson reported the activities of that committee during the past year.

The presentation of the Accounting Machines Committee, C. E. Eble, Consolidated Gas Company of New York, chairman, was divided into three sections. P. H. Brown, of Brooklyn, N. Y., presented the second edition of "Wrinkles," short cuts to efficiency which have been found successful in other companies. In connection with this presentation, considerable discussion centered around a sales analysis sheet used by one of the larger companies.

"Cost of Printing and Addressing Service Bills," by E. F. Embree, of New Haven, Connecticut, was the second presentation of the Machine Accounting Committee. This report described the advantages of the combination addressing and bill printing machine, particularly from the cost viewpoint, and outlined the experiences of one company with this type of machine.

C. E. Eble summarized recent developments and improvements in accounting machines and described briefly the "fundamentals charts" prepared by the committee, which show the comparative features of the various makes of machines.

Professor Robert Graham, of the University of Chicago, who cooperated in the preparation of the Accounting machines report, spoke briefly regarding the advantages

of machine accounting and the need for a thorough understanding of both the possibilities and limitations of mechanical office equipment.

An address entitled "Analysis of Commercial Bank Statements from a Depositor's Point of View" was made by F. B. Flahive, Columbia Gas and Electric Corporation, New York City. This address outlined the procedure followed by one company in determining the soundness of financial institutions, and stressed the importance and need for such a procedure.

The Office Management Committee, H. E. Cliff, Public Service Electric and Gas Company, chairman, presented two subcommittee reports. The first report described the results of a study of "Commercial Office Work Standards," by E. N. Keller, of Philadelphia. The importance of setting both qualitative and quantitative work standards for clerical employees, and then applying incentive wage plans based on these standards, was clearly presented.

P. J. Sweenie, of Chicago, presented the second subcommittee report of the Office Management Committee entitled "Standardization of Forms and Printing." With the aid of charts, Mr. Sweenie described the principles of form standardization, as well as the procedure followed by a representative utility company.

A most interesting and unusual presentation entitled "Meter Reading and Collecting of Accounts," by Thomas Carmichael, engineer and general manager of the Portsmouth Gas Company, Portsmouth, England, was a feature of the session. This report was the first presented before the section by a representative of the gas industry from overseas, and was enthusiastically received.

E. B. Nutt, vice-chairman of the section and chairman of the Affiliated Association Representatives Committee, reported the activities of his committee in contacting and stimulating interest in accounting matters in state associations.

The program was concluded by J. I. Blanchfield, a former chairman of the Section, who summarized the outstanding events of the two-day meeting.

### Mueller Buys Groble

THE Groble Gas Regulator Co., Anderson, Ind., has sold its business to the Mueller Company, Decatur, Illinois.

## COMMERCIAL SECTION

N. T. SELLMAN, Chairman

J. W. WEST, Jr., Secretary

F. M. ROSENKRANS, Vice-Chairman

## What Price New Business?\*

**S**PEAKING recently in the House of Commons, David Lloyd George, Great Britain's wartime Prime Minister, said, "There are three experiments now proceeding, on the success or failure of which the whole outlook of the world depends—the Russian, the Italian and the American. The American is the most important." Let us just briefly analyze this statement and determine for ourselves what Mr. Lloyd George means when he says the American experiment is the most important. In Russia we have the rule of the so-called proletariat. Theoretically at least, the wage earner, the common laborer, is in control. In Italy, the reverse applies. No semblance or even pretense of democratic rule remains. The iron hand of dictatorship controls government, capital and labor.

In America neither extreme is contemplated. We are attempting to recognize all elements—capital, labor and consumer, as integral parts of our economic whole. The power of government is being used in a supreme effort to prevent a recurrence of those breakdowns which history would indicate are inevitable without some coordinating agency. Impartial observers agree that the one fundamental which will make the American experiment the success intended for it is that industry shall earn the necessary margin which will enable it to pay wages adequate to give the buying public an ample purchasing power to provide itself with the necessities and amenities of modern life.

The gas industry is the provider of a service that ranks foremost among these necessities and amenities. This means that we have a very definite interest in the outcome of the movement and must assume a corresponding responsibility to accelerate the advance of the fundamental N R A idea. The greatest direct contribution which we can hope to make to the success of this great economic experiment is the adoption within our individual companies of a sound aggressive new business policy. We are challenged to put our business on a profitable basis despite rate reductions, despite the handicap of a lessened ability to finance development programs by means of outside capital, and despite the threatened increase in almost every item that enters into the cost of rendering service. Notwithstanding all of this, the fundamentals of our business are the same today as they

By Morse DellPlain

Northern Indiana Public Service Company

were yesterday and if our executives will display the necessary energy, aggressiveness and flexibility of mind, we shall still do our part in the face of new conditions, and when I say "executives" I refer to sales executives as well as others.

The average manufactured gas system is badly underloaded. Carrying this idle investment, in itself, may be the difference between a profit or a loss. This fundamental idea will indicate to you a very obvious new business policy—more load on the present system. Present capacities having been determined, a new business program is formulated to use these capacities to the limit. Preparing such a program means finding the answer to several fundamental questions with reference to our own particular situation. How much can we afford to spend to get this additional load at a reasonable profit? Spending this money may take the form of a re-alignment of our rates to make additional uses attractive to more people, thus calling for a temporary sacrifice of revenues from present users. Obviously, the adoption of promotional form of rates is a very necessary preliminary to any aggressive load-building program. What are the base and incremental costs of gas in our particular system? What are the base and incremental uses of gas as determined by local acceptance? How much can we afford to spend in direct promotional expense to pioneer new appliances which cannot possibly be sold in effective volume at a merchandising profit? There must be no haphazard thinking in finding the answers to these questions.

I wonder how many men here today know how much every dollar of added residential revenue secured by the sales department is costing in new business expense? If I should ask for the answer in terms of merchandise volume, or appliance sales per meter, or even in terms of percentage of gross revenue, it would be much easier to have the answer. However, in my opinion these latter measuring sticks are not true gauges. The real story can be gotten only by translating the appliances sold into the revenue which those particular appliances produce under our own particular rate schedule, and then determining what ratio this revenue bears to the total amount of money spent to secure that additional revenue. This ratio is the proper gauge as to whether we are spending the cor-

rect amount for new business effort. What should this ratio be? One prominent utility sales executive advocates that his company spend the full first year's estimated revenue for load added to existing lines. This might be a good figure for us to experiment with in the gas business. Personally, I am inclined to think it is too high for normal conditions. To indicate a standard ratio for our business is impracticable because it must necessarily be a variable, based on localities, existing rates and local business conditions. The locality determines the character of the needed incremental business. The existing rate determines the "spread" available for promotional purposes. Local business conditions govern the degree of resistance likely to be encountered in securing the load.

It is surprising the amount of loose thinking one encounters on this subject of new business costs. Too frequently we hear someone in all seriousness suggest that because we are prepared to make a capital investment of approximately four times the estimated annual revenue to secure business on a proposed extension, we are equally justified in spending four dollars in new business expense to secure one dollar's additional revenue on existing mains. The failure to appreciate the distinction between a capital investment and an operating expense shows a lack of knowledge of fundamentals which might be humorous were it not fraught with so much danger to the business.

To arrive at sound conclusions in the study of new business economics we must have in mind a clear line of demarcation between capital and operating charges. Generally speaking, this is no time to make capital expenditures, but with our present under-loaded systems I believe it to be good business judgment, if we can possibly raise the money, to spend generously to increase load on existing mains, allowing the matter of reaching out into new territory to await the dawn of a more propitious day. Allow me to suggest that liberal appropriations can profitably be made for intensive sales effort over the next few months to bring back to our mains customers who have had to give up the use of gas during the past few years. Delaying this program too long may prove fatal.

We, as an industry, must develop a new conception of service standards. Our thoughts on service in the past have been confined largely to the matter of the quality or the pressure of the gas itself, with

\* Address before Commercial Section, The International Gas Conference and Fifteenth Annual Convention of the American Gas Association, Chicago, Illinois, September 27, 1933.

some perfunctory standards as to the servicing of the appliances. I feel that we can well devote considerable attention to impressing our public with the desire of the gas company management to maintain the most cordial of contacts with its customers. We should go to the extent of doing things for them which, under ordinary conditions, should not be expected of a private business but which are expected from a public service corporation operating by virtue of a public franchise and dependent upon the general public for its very existence. We must bend over backwards, so to speak, to impress our customers with our interest in having our service as nearly perfect as possible. Public acceptance of our product will be directly proportional to the quality of our over-all service.

A restricted advertising program for purposes of economy is an economic mistake, in my opinion. Newspapers are the eyes and ears of society. Because it reaches more persons than any other medium, the newspaper is the means through which we should tell our story. Most people in the community read little except their local newspaper, and the presses of the country turn out nearly 40,000,000 copies daily for these readers.

Local advertising—advertising that brings home to the consumer the fact that the utility truly is a part of his community and usually one of the largest taxpayers in it—is vital to the industry. This advertising should emphasize particularly the service rendered and the desire of the company to truly meet the demands of the community; demands not only for therms of gas, but also for the rounded additional services for which the customer pays in his monthly bill.

The only way to build up incremental use is by securing the acceptance of new load-building appliances which the ingenuity of our scientists and the trend of reduced rates are making available to the general customer. The breaking down of initial resistance to a new appliance through persistent newspaper advertising greatly reduces the ultimate sales cost.

You will find also that the former customer who may have had to give up the use of gas during the past few years is still reading his local newspaper. His newspaper is one of the last of the necessities which he will surrender. If we are to regain the load that will come from reconnected services we must, among other things, continue to tell our story through the local paper.

While there have been many complaints directed against the private utility, the American public is essentially fair-minded and if the facts are placed before it fairly, the utilities as they are operated today should have nothing to fear, and the newspaper is, in my opinion, the best medium through which to give these facts to our public.

Any discussion of a proper new business policy for a gas company could not possibly be adequately covered without

some reference to the question of whether or not a utility should merchandise appliances. I am opposed to gas utilities retiring from the appliance sales field. I think it is a political expedient which is basically unsound. No business can develop beyond the public acceptance of its product. If, through not buying gas appliances, the public is educated to prefer other fuels, or no active steps are taken to teach our present customers additional uses of gas, the gas industry has not the slightest chance for development. Discontinuing merchandising has been tried before. Experience has proved it to be just an opiate in the form of a political concession which may bring us temporary relief. But at what a price! There are several utilities which have discontinued merchandising at some time or other, only to resume with the realization that swallowing a political pill will not cure an economic headache. A clearer view of the consequences, more patience, and a full consideration of the whole problem will produce much sounder results.

The active movement to legislate the gas companies out of the appliance field was started by certain dealer organizations originally as a protest against some of our merchandising practices and later, in the first flush of the depression, as an attempt to secure more business for themselves. Nationally, we have been able to arbitrate our differences with the two dealer organizations from which the greatest outcry came. The American Gas Association through its Principles of Merchandising has formulated a code acceptable to those dealer groups. This is first-hand evidence that dealers want us to remain in the business of selling appliances so long as their causes for grievance are removed. Many gas companies today are observing these principles and enjoying amicable relations with these dealer groups, thus gaining political prestige without sacrificing economic advantage.

The fallacy that the dealer would gain the business surrendered by the gas company has been established time and time again, both in those states where it is illegal for the utility to merchandise, and in those communities where gas companies have experimentally withdrawn from retailing or eased up in their efforts. After several years of aggressive storage water heater promotion in one of our districts, we, as an experiment, withdrew from the field and turned the business over to the dealers. As the momentum of our effort subsided, the volume of water heater sales dropped until the dealers were actually selling less water heaters when we were out of the business than they were with us in it. They came to us and asked us to go back into the retail field. They realized that without our leadership, our educational and sales promotional effort, they were totally unequal to the job. The dealer

cannot and should not be expected to do the job.

The pioneering of specialty appliances like storage water heaters, refrigerators, etc., and the maintenance of a high quality standard on more acceptable appliances is a costly job and it certainly is out of the question for a dealer to do it adequately and profitably. The job only becomes profitable to the dealer when he can benefit by the opportunities created by our own sales activities. Co-operative advertising and sales assistance to the dealers are all good and perfectly proper things for us to do, but the only sure way to pioneer appliances is to secure satisfied users of these new appliances. Every utility merchandiser knows that important as these measures are in themselves, you cannot pioneer appliances by featuring low prices or putting in window displays, expecting the public to come in and take your equipment away. On the contrary, it takes well-trained salesmen, expertly directed to secure any worth-while volume of this business. Very few dealers can afford to do this pioneering work.

While discussing this question of salesmen, allow me to say that the major portion of our dealer-stimulated political troubles is due primarily to our sales compensatory policies. In far too many instances in using volume of appliance sales as the measuring stick, we find that the gas company salesmen are paid to take appliance sales away from dealers. Theoretically, we may feel that this is not so, but on the firing line, when a salesman's income depends directly on whether or not he sells his appliance, his loyalty is being stretched too far when we expect him to stand by supinely and surrender his own commissions to a dealer to sell as good an appliance load-builder as his.

The big curse of measuring the success of a merchandising department in terms of its sales of appliances in dollars and cents and with its compensation plans patterned accordingly is that it is too restrictive in its general effects. It intensifies competition where there should be cooperation in the sale of an appliance. It tends to discourage dealer cooperation and nullify most of the potential benefits of favorable trade relations. It is also restrictive to the manufacturing group; these manufacturers have a most important place in this picture and any utility policy that restricts opportunities for all manufacturers of quality equipment in any particular field is restrictive as far as the better interests of the utility are concerned. The utility, by limiting its efforts to the products of one or two manufacturers, to all intents and purposes throws an undue proportion of the total available business to those one or two manufacturers at the expense of those other manufacturers who are both willing and able to do a job but only with the utility support now given to

(Continued on page 441)

## INDUSTRIAL GAS SECTION

F. B. JONES, Chairman

C. W. BERGHORN, Secretary

J. F. QUINN, Vice-Chairman

# The Changing Aspect in the Competitive Market for Industrial Fuels\*

**T**HREE has probably never been a time when it was more difficult to forecast the future than it is today. In every nation of the world, changes in government and changes in economic thought are introducing new and untried factors, the ultimate influence of which is open to speculation. Opinions as to their value vary with the political inclinations of the person to whom you are talking. Yet in the final analysis, no man knows what the ultimate result will be; and, so long as our country is dedicated to an experimental course of action, we can only hope that it will be successful.

Despite this fact, there are certain definite signs on the horizon which cannot be ignored. Whether our political-economic experiments fail, or whether they succeed, there are still certain trends in industry which have been definitely established; and there are certain elements which must be recognized, regardless of the path our future course may take.

As members of the gas industry, you and I are interested in the effect these trends and these elements will have upon our business and upon our personal lives. Certainly we are in the midst of a revolution; and if these factors offer us an opportunity or hold out the shadow of a hope in this day of uncertainty, we should carefully examine them.

For the first time within the history of man upon earth, we are paying the farmer for wheat which he does not produce; cotton which he does not grow; and live stock which he does not raise. Production has at last caught up with consumption. The aim, the goal of industry no longer is production—it is definitely and positively to increase consumption. Of course, this thought is not new; nor is it original. For years we have said this same thing; but until the events of the past three years so brutally confirmed its truth, we have accepted it without giving it serious thought. But no longer can we ignore its truth. If we are to live, regardless of the conditions under which we will live, we must recognize this fundamental change in our economic lives and concentrate our efforts on solving the problem which this change brings to the fore.

We, in the gas business, are essentially

By Henry O. Loebell

Combustion Utilities Co.

engaged in supplying the market for heat. Heat is a fundamental requirement of man in his home and in his industry. Hence, the market for our product will continue to exist, regardless of what the future may hold. But whether or not we continue to serve any portion of that market is strictly dependent upon how you and I conduct our business in the immediate future and also upon whether the new economic-political philosophy raises the standards of living of the average man.

From past experience, the gas industry has good reason to accept the viewpoint that notwithstanding its reputation as a protected industry, it is nevertheless a competitive business. During the past three years, not only has the industry been placed in a defensive position with its customers as to rates and the values of its service, but either through choice or apparent necessity its best offensive weapon—the sales and service contacts—has been weakened. As never before, the customer demands attention and must be sold on the values for which he pays—not by legal rights and court decisions but by service and personal contact.

We are concerned today with the changing aspect of our competitive sales problems, particularly with the competition in industrial fields. To the extent that competition in one field affects the other fields, I shall cover the industry as a whole. In speaking of industrial load, I am including both the manufactured and the natural gas branches of the industry, notwithstanding the fact that the levels of prices limit the manufactured gas business to a class of heating processes which are more exacting, while the natural gas price levels include all heating operations and all heating processes.

#### *Gas Is Sold at a Premium*

At this point I want to digress. Before preparing this talk, I wrote to fifty or more men in the industry, asking certain questions as to their experience and their opinions on certain phases of the business. Their replies were invaluable to me in the preparation of this paper and I wish to express my appreciation for their splendid cooperation and help. The particular reason why I have brought this

up at this time is because one of the questions I asked these men was if gas could command a premium over other fuels on a B.t.u. basis.

In practically every case, they replied that gas could command such a premium. Now, certainly, this is not true just because it is gas. The business man doesn't pay out good money unless he gets something for it. The amount which he will pay as a premium for gas is exactly proportional to the value he places upon the things which gas will do for him which other fuels will not do.

Obviously, this means that the utilization of gas is the measure of its value. To date gas has had a distinct advantage in the field of utilization due to its cleanliness, its ease of control, and its automatic application in equipment designed and installed to develop these values. These are the things for which the purchaser has been willing to pay a premium.

In addition to utilization, good service, uniform fuel, adequate maintenance, engineering help and good selling effort constituted the elements which really create the value of gas and has justified a price above the bare heat value of the competitive fuels.

But the competitive fuel industries are fast reducing the value of this premium. The development of improved burners, stokers and producers by the coal industry; the development of more satisfactory oil burners and controls, encouraged by distress oil prices; the improvements in oil transportation, storage and handling are all contributing to a better utilization of these fuels. The economies which gas has been able to show in labor-saving and superior production are rapidly being eliminated by these improvements. And the end is not yet in sight.

The entrance of butane in the competitive industrial market has nullified to a large extent many of the advantages of utilization with gas to the point that the butane sellers are really riding in the same wagon with the gas industry as far as developing the market is concerned.

As the struggle for markets becomes more intense and the fact becomes more apparent that the only hope of survival lies in utilization value, we can expect more and more improvements on the part of our competitors. Obviously, our only course of action is to meet these improvements with new and better improvements of our own, or reduce our rates

\* Address before Industrial Gas Section, The International Gas Conference and Fifteenth Annual Convention of the American Gas Association, Chicago, Ill., September 25-29, 1933.

in order to retain the business we now have.

The summary of our present position regarding competition is as follows:

In the past we have sold gas at rates higher per B.t.u. than petroleum or coal products because we secured better utilization values from gas.

1. In the recent past, the prices of the competing fuels have been reduced, thereby increasing the spread between gas and competing fuels.
2. In the last few years the improvement in utilization of competing fuels has been greater than the relative improvement in gas utilization and, therefore, the spread in value has been further increased.
3. At the time when sales activities of competing fuels have been stimulated by these advantages, the gas utilities have retrenched in both sales and development.

Let us look at these factors in more detail.

The coal industry, fighting a reduced fuel market with uncontrolled production, has demoralized its price structure. At the same time better grading of coals and better and greater variety of stokers and producers have been important factors in improving their position.

The oil industry, in substantially the same position as the coal industry, has had its price structure reduced to levels considerably below the cost of production. More uniform quality and purity, and a greater variety of products have been the principal contributions to broaden their market and secure greater recognition. The low levels of price for petroleum products have stimulated development in new burners, stoves and heaters, both for domestic and industrial purposes.

The new natural gas ventures have been compelled to accept business at levels in competition with both coal and oil.

Butane, a by-product, had to seek its level of price in competition with fuel oil, and has found the high-priced manufactured gas industrial market an easy load to displace. There has come a more general appreciation from the part of the oil refiner of the possibility of butane and propane, with the result that a greater number of refiners are entering this market.

This struggle for markets has made necessary the closer analysis of the elements that made each fuel more preferable and has stimulated research and development so that each can gain an advantage over the other.

These facts are more or less familiar to all of you. You have all had some experience in trying to overcome the new phases of this competition. Some of you have been more fortunate than others in holding the business you have, but all of you, I am sure, will agree that the competition is getting too keen for comfort. The problem, therefore, of retaining and

increasing sales depends upon the answer to the following questions:

1. Is the trend in competing fuels going to be toward higher price levels?
2. Can the gas industry reduce its costs and rates?
3. Can we increase the values of gas to the user?
  - a. By better utilization;
  - b. By better service;
  - c. By better selling.

Upon the proper answer to these questions depends our ability to develop our business.

#### *The Trend in Prices of Fuel*

##### **1. IS THE TREND OF PRICE LEVELS IN THE COAL AND PETROLEUM INDUSTRY GOING TO BE UPWARD?**

Generally, the answer is yes, provided that the industries, through organization, with or without government aid or supervision, maintain a reasonable ratio of production to consumption. Generally speaking, in the past three years these two major industries have operated at a loss. With the increased costs of labor, occasioned by the new codes, the cost of production is bound to increase. Whether or not the reckless competition occasioned by over-production will be arrested is as yet unknown, but it seems reasonable to expect a more uniform and higher fuel cost. Of course, this factor will influence the manufactured gas industry and raise its production cost and, to a minor extent, increase the cost of natural gas production.

The new level of competing fuel prices is bound to favor gas. The extent of this advantage will be known only when the new prices, as a result of the higher production costs, as well as pro-rated production, have had an opportunity to function. After a reasonable period of time their true level will be established. Regardless of the relative position in the price level between gas and the competing fuels, the occasion of a change in price always offers an opportunity to every gas man to approach the potential customers and discuss the fuel situation with him. This is a good opportunity to sell your customers on the value of gas service, on its constantly reduced level of price, on the more efficient equipment available, and the engineering help that the gas industry offers.

The trend in the price of butane is not as clear, it being a by-product, and its cost is not limited by production costs, but follows the production of natural gas gasoline. It must seek its own level of price. To a certain extent it is governed by fuel oil prices. With higher fuel oil prices, butane should follow that trend. There is, however, another element that enters in this consideration. With a stabilized oil industry and higher gasoline prices in the field, the production of natural gas gasoline is greatly stimulated and, as a result a larger quantity of butane produced. Whether this increased

production will preclude the butane prices from moving sympathetically with the price of fuel oil remains to be seen. It is entirely a matter of how energetically this surplus is marketed and the extent to which higher butane production can affect the structure of fuel oil prices.

In the case of the propane butane production in the local refineries, the price structure will still be about 7 cents per gallon above the base fuel oil price.

The market for butane is identical in all respects with the market for gas. Any improvements made in the utilization of gas are equally adaptable to butane. Hence, if the ultimate price of butane enables it to compete with manufactured gas, the only hope of maintaining the market lies in reducing our production costs or by introducing natural gas. Present methods of distribution enable natural gas to undersell butane and, hence, the manufactured gas companies faced with butane competition should give consideration to changing their source of supply to include natural gas if they desire to maintain their present volume of business.

#### *Can Gas Be Produced More Economically?*

##### **2. CAN THE GAS INDUSTRY REDUCE ITS COSTS AND THEREFORE ITS RATES?**

This question is obviously a difficult one to answer, but one which must be answered in the affirmative. In all forms of conflict or competition, the best defense is a bold attack. The gas industry cannot afford to be driven into a defensive position and hence it must prepare itself so that it can invade its competitors' markets boldly with a reasonable hope of success. This means that we must examine every phase of those elements which comprise our service and bring costs to the irreducible minimum while bringing service to the ultimate maximum.

First of all, this means we must look to our production costs. Present methods of manufacturing gas must be analyzed and examined. Load factors on production equipment must be investigated and improved. The use of oil in place of coal, the use of cheaper grades of oil and coal should all be considered. Every phase of the production processes should be carefully broken down and improvements made wherever possible. The industry should recognize this need and provide the machinery and the finances for research in this field in order to bring down the unit cost of finished gas.

Similarly, the natural gas industry should examine its operating expenses, look into its load factors, analyze the business on its lines, and put forth every effort to reduce its unit costs.

This step must be taken immediately if we are to put ourselves into condition to compete with the improvements which are being made by our competitors in every phase of their activities. The premium which we have always felt that gas could and should command is the ele-

ment which is in jeopardy. The competitive fuels have always been able to undersell gas on a heat unit basis. As their improvements tend to reduce this premium, we must make every effort to reduce our costs.

The second place wherein we must look for economies is in our distribution system. For years our engineers have wrangled and debated over the merits and demerits of high- and low-pressure systems. So long as our business was conducted on the policy of legal sanction of adequate rates, this controversy was perhaps justified. However, as we are now approaching the point where economic considerations must take precedence over legal rights, we can no longer debate an academic subject. Our problem is to make the best and most efficient use of capital that modern engineering can produce.

It means that the volume of gas transported per dollar of main investment must be doubled, tripled and then quadrupled. If this means higher pressures, we must use them. If this results in fluctuations at the customers' burners, we must install house-regulators. If it means increased leakage, we must spend more time and money in perfecting joints and repair methods.

The third element which we must recognize is the economic importance of what I choose to call the incremental viewpoint. I term it this, because it is strictly a matter of viewpoint. Managements, comptrollers, financial watch dogs, rate experts and accountants may argue academic problems as they choose. The fact remains that every gas company which exists can obtain additional business at no increase in its expense beyond the bare cost of the gas itself.

It may be heresy to deny that every phase of the business should carry its full proportion of the overhead expense. If so, this is heresy.

Any business which produces a margin of profit over the actual out-of-pocket expense it incurs helps to that extent in reducing the unit cost of the gas sold prior to the acquisition of such business. For this reason, sound judgment dictates that such incremental business should be secured.

I am fully cognizant of the fact that our business does not permit discrimination and that we are compelled to use rates fixed by regulatory bodies.

Because of this I know that certain portions of this incremental business cannot be attached without jeopardizing the rates on present business. Here the problem resolves itself into determining whether or not the gross profit on the new business is equal to or greater than the loss on the old business resulting from the decrease in rate necessary to obtain the new business. If the profit on the new business exceeds the loss resulting from the rate reduction, obviously the change in rate is justified.

Moreover, there are certain loads which have been held on the gas company lines, for instance, bakery loads, restaurant loads, even water heating loads, etc., the rates of which are too high not to invite competition. These loads are vulnerable and while there may not exist sufficient additional business to compensate for any reduction in rates, the fact that this business is more readily attacked by competition suggests that a different treatment must be considered. To wait until the business is lost because the rate is obviously too high, and accept the loss in the hope that some of the business is going to stay, in spite of the competition, is simply to stick your head in the sand like an ostrich and wait until the storm is over. The obvious thing is that if one customer makes a change to another fuel, is satisfied and can be used as an example by the salesman selling competitive fuel, the task of holding that load becomes more difficult and the rate reduction to hold the business much more drastic.

This is perhaps an illustration of lack of flexibility in rates. It is also a good example of lack of proper sales viewpoint.

However, too many executives and too many rate experts ignore the economic differences between various loads and emphasize the desirability for one or two standard rates to the detriment of the sales department. Certainly, standardization and simplicity in rates and rate structures is desirable. But to carry it to the point where it prevents the company from obtaining new business is not sound judgment.

Class rates are possible and desirable and close analysis of the various loads shows that certain differences in load characteristics can be capitalized to the advantage of the company by incorporating them as the justification for the specific rate necessary to meet a specific condition.

Managements, sales departments and rate engineers must examine their potential loads from this viewpoint and then combine the possibilities which present themselves with the economic results to be obtained when considering the business as incremental load. When this is done, practically every gas company in existence will be able to expand its market to some extent almost overnight.

To many manufactured gas companies the opportunity of introducing natural gas has been presented. The arguments and viewpoints presented against the introduction of natural gas always consider the safe position of the utility at present. That safety, however, is only imaginary, as the very factors which we have just been discussing so conclusively prove. Coal, oil and butane are driving directly towards the manufactured gas market and are employing low cost and improved utilization as the attractions to lure your customers away. Unless you can meet their offers with more attractive pro-

posals of your own, you know that you will lose this business, even though you have served it faithfully for years. Hence, when you have reached the irreducible minimum in production costs and still find yourselves a target for competitive attacks, natural gas alone will offer you the means of saving your business.

But even natural gas will not in itself be sufficient. For we essentially must increase the value of gas to the user.

### 3. CAN WE INCREASE THE VALUES OF GAS TO THE USER?

Rates are an important factor in the acquisition and maintenance of business but they are, by no means, the most important factor. Rates are prices, but prices alone are not values.

Price chiseling has been rampant and prices below values or even cost have been common. The current trend is bringing an end to this disparity and values will again be the dominating consideration. At the same time, these values and their relation to price must be proven and their reality sold to the purchaser.

Undoubtedly, the greatest opportunity open to the gas industry lies in this direction. Success in this way is a two-edged sword which justifies prices on one hand and reduces costs with increased volume on the other.

There are three ways to accomplish this end.

- A. By better utilization;
- B. By better service;
- C. By better selling.

A. Considering the first, utilization: Gas in itself has no value to a customer. Its value is realized and its rate justified through the equipment in which it is used. It is just as consistent to sell an industry a modern lighting system without caring whether the customer uses Mazda, carbon or arc lamps as it is to sell industrial gas without caring about the equipment in which it is to be used. The equipment through which your values are to be delivered is as important as the rates for the fuel used. The gas company managers study rates and require their approval on all schedules, but how many know the quality of equipment being offered to their customers. Too often the executive instruction is "Get the cheapest you can." Therefore, with no definitely understood policy, there is no definite executive follow-through to see that the promise is performed.

An analysis of lost load brings the conclusion that rates are too high. It is not often that the analysis shows the *real reason*, which is—that the value of the service to the customer is too low. Regardless of all sales effort by the gas company, when a job is sold the purchaser from that time on bases his judgment on the reasonableness of the gas rate upon his own experience. If he does not get value received, all the legal decisions and evaluations you can produce cannot justify your rate to him.

With the above thoughts in mind, and I believe they are fundamental, we find a strange paradox in our industry. There are exceptions, but in far too many cases in industrial sales, after the analysis has been made and the rate set; after our salesmen sell a job; after hours, days and even months have been devoted to convincing a prospect that he should buy his fuel on the basis of values, not price, there is a failure to carry through on succeeding steps to meet the salesmen's representation. If it were not so serious, it would be really funny to hear a gas company executive expound on the value of the intangible advantages of gas to a prospect and then turn around and help the same prospect buy cheap equipment and encourage poor utilization by pooh-poohing the value of utilization research; by ridiculing the value of combustion experience; by ignoring the value of adequate insulation—proper materials—controls, etc.

I have never been able to understand why this should be true. My general conclusion leads me to believe it is the fault of management itself. There is certainly a lack of common viewpoint and coordination between the various departments who have some part to play in the final result of an installation. Certainly to the extent that gas company policies are not definitely understood and coordination is not obtained, it is management's problem. In many cases, management itself feels that the utilization equipment problem is solely the purchaser's problem, especially where the purchaser buys the equipment. They do not appreciate that experience alone can give a sound interpretation in utilization and that a few hundred dollars spent at this point means thousands of dollars of return in permanent load.

The multiplicity and variety of heating problems in a territory in itself precludes an industrial gas salesman or engineer being qualified in having all the detailed knowledge and experience necessary to discuss these problems with the various individuals in the customer's plant. These men are invariably experts in their own operations and have had wide experience in their own problems. One of the soundest conceptions I have ever known of the industrial gas salesman's job is to bring in the best experience available on a particular problem; and yet how many industrial salesmen would hesitate to make such a recommendation to their general manager for fear they would be told that that was what they were hired for. The fault here lies in the fact that management itself does not appreciate the sales and engineering problem.

This point should not be overlooked by the gas industry. No gas company in existence today has within its own confines every type and every phase of gas combustion known. Such experience and such knowledge is available only to corporations who specialize on gas com-

bustion in every field of activity and in every section of the country. Furthermore, to be of value to you, such a corporation must maintain a research department which takes the experience of its field men and applies this experience to every combustion application in order to find out what is best for each and every problem it encounters.

Nor is this all. As a custodian of the properties in your charge, you should investigate the field of utilization. You must sooner or later realize that your business is dependent upon the improvements made in that field. And you must give your business, your bread and butter business, to those organizations who are groping into the future, spending their money on research, making possible the means by which you and your properties will continue to live and endure.

Unless this is done; unless research is encouraged; unless improvements are made; unless you cooperate in building up organizations who can supply the necessary service and developments, then you must inevitably see the gas business decline to the status now occupied by competitive fuels, for surely and certainly the improvements in utilization which these fuels are making are cutting down piece by piece the advantages which gas now holds.

#### B. Can we increase the value of gas by better service?

This question needs no discussion. It does need emphasis in view of the fact that service standards have been allowed to decline during the past three years. Equipment has not been maintained by your customers. You have an opportunity to help them get better values out of their use of gas, of which you can take advantage.

What contacts do you have with your customers to overcome the inconvenience and negative reactions to monthly meter readers and bills? Isn't your customer entitled to at least a periodic personal visit, made solely in his interests, to see if he is getting the best service? Such contacts are the best way to meet the too common mistaken viewpoint that the gas company is in favor of inefficient equipment because it means more revenue.

#### C. Can we increase values of gas by better selling?

It may sound paradoxical to say that our sales and engineering are both the strength and weakness of our position. The strength lies in the contacts with our customers and in the true knowledge of their wants, as well as in the friendship we have with the executives of the industries. Our weakness as an industry lies in the inadequate man power and in the quality of existing man power which allows individual situations to become horrible examples that can be used by the competitors in invading new localities.

So that, even if we reach the acme of perfection in the manufacture and distribution of our product, as well as in its utilization, we still will not have solved our problem. For there is not a single advantage which gas does possess or which gas can possess which cannot be matched with electricity, butane and, to a lesser degree, with fuel oil.

This is as true for the cooking, water heating and house heating fields as it is for the industrial field. In fact, we have reached the point in our development where we must consider the industrial market not as a separate and distinct activity, nor the house heating field as an independent branch of our business, but where each of them is an integral part of the business as a whole. We must study the relation of one to another and must develop one to support the other. We must add here and reinforce there to obtain the best over-all result.

To obtain the maximum use of invested capital; to obtain the minimum cost of production; to obtain the best efficiency of utilization requires that we work our equipment to its maximum capacity and supply the entire heat requirements of our customers in the most economical method.

It further means that we must analyze our individual loads and add to each classification just that amount of load which is necessary to create economic production and distribution. And then we must take our new task of supplying heat to the people.

Consequently, this means that in the final analysis our problem reverts to one of sales. Say what you will, ignore it as you please, the fundamental problem of the gas business is a sales problem, just as it is the fundamental problem of every other business of today.

But whereas other businesses are equipped with the experience and time to cope with this problem, the gas business is not so equipped.

The gas industry has never been sales-minded. Its executives are financiers, attorneys, or engineers who have depended upon pure economics to support their position. So long as we were without serious competition, this was possible. But it is possible no longer.

The pressure of competition is even now being felt. In the future it will grow increasingly stronger. Our only answer is to perfect our economics first and then sell our product.

The responsibility of the sales department was never greater. It has two problems.

The first of these relates to its internal sales program. As before stated, most executives do not sympathize with sales problems. They think of sales programs as having something to do with appliances or load building. They endure the sales department as a necessary evil.

It is up to the executive to change this attitude. He must recognize that a sales department is not a mere dispenser of

stoves and burners. He must see that it is the one contact he has between himself and his customers. He must realize that his salesmen are merely the reflection of his personal opinion of his customers and if these salesmen are dull, unintelligent and lacking in initiative, so will his customers believe the management to be. But if they are alert, pleasant, courteous and convincing, his customers will assume they are but typical of their officials.

This means that management must insist upon capable salesmen and then must pay them well. They must be happy and enthused with their opportunity. This again means they must be delegated authority and given responsibility. No good man will continue to be a highly paid office boy indefinitely. If salesmen are incompetent to make sales decisions, they are incompetent to remain on the pay roll. No management is so all-wise that it knows everything about all phases of the business. Hence, a management which is experienced in finance, law or engineering is no more capable of making sales decisions than is the sales department capable of solving legal, financial, or engineering problems. The quicker management recognizes this fact and places independent responsibility upon the sales department, the quicker our industry will be to realize on its possibilities.

It is imperative that the sales department help the management in recognizing the problems peculiar to it by emphasizing those psychological factors of human behavior which are a part of the sales job, but are cast aside in the exercise of financial and engineering tasks.

The second sales problem relates to the job of customer sales. Here the gas industry is woefully unequipped. Successful as have been individual appliance campaigns, the gas industry as a whole is not experienced in mass selling. Yet mass selling will be the keynote of the next era of prosperity.

By mass selling I do not mean high-pressure salesmanship. High-pressure salesmanship has no place in a business which is dependent upon recurring sales and permanent satisfaction.

By mass selling I do not mean the combining of every element essential to successful sales in one gigantic over-all plan and then pursuing this policy to a pre-determined goal, whether it requires five weeks or five years. Our competitors will use this tool. We have seen it worked to a limited extent by the oil burner people in the sale of range burners as well as house heating burners; we have seen it worked by the several refrigerator companies and, two years ago, the electric industry was just getting ready to launch a mass range-selling campaign when the depression postponed it. These sales efforts will be started by our competitors sooner or later. They

must be started. And again, I must repeat that an offensive drive on our part is the best defense we have.

The gas industry must accept and use the ideas of mass selling because every industry and every corporation which continues to live will have to accept it. It is the only means by which corporations will be able to survive in the intense drive for business which will characterize the immediate future. Both industry and government are in agreement that this country must wait no longer for prosperity to return. Instead we must go out and bring it back by our own efforts. And this means that mass selling will be the dominating activity of the next few years.

And so, in conclusion, I wish to say to you that we stand on the threshold of

crease the effective use of our capital; expand our business on the incremental point of view; and look more carefully at the equipment we install. And then, when we have done this, we must incorporate every phase of our service into one over-all sales program and employ the latest principles of mass selling to carry our message and our product into every nook and corner of our potential market.

### Mid-West Gas Association

THE thirteenth Annual Gas School and Conference conducted jointly by the Engineering Extension Service of the Iowa State College at Ames, Iowa, and the Mid-West Gas Association, will be held at Ames, November 13-16 inclusive. An attendance of approximately two hundred is anticipated.

Plans are being made to make this one of the best conferences held thus far by a committee of which Robert F. Galpin of the Iowa Electric Co., Muscatine, Iowa, is chairman. There will be exhibits of distribution and metering equipment. Those desiring to make arrangements for exhibits should get in touch with Professor L. W. Mahone, Iowa State College, Ames, Iowa.

The entertainment and banquet will be held the evening of November 15. Further information on the conference can be secured from R. B. Searing, Secretary, Mid-West Gas Association, 302 Utilities Building, Sioux City, Iowa.

### Convention Calendar

#### October

10-13 National Association of Railroad & Utilities Commissioners  
Cincinnati, Ohio

24-26 American Petroleum Institute  
Chicago, Ill.

opportunity. We can act and live; or we can stand idle and die. The choice is distinctly ours. But if we live—and I believe that that is what we want to do,—we must lower our production costs; in-

### Statement of the Ownership, Management, Circulation, Etc., Required By the Act of Congress of August 24, 1912

Of American Gas Association Monthly published monthly at Brattleboro, Vt., for October 1, 1933. State of New York, County of New York, ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Allyn B. Tunis, who, having been duly sworn according to law, deposes and says that he is the editor of the American Gas Association Monthly and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, American Gas Association, Inc., New York, N. Y.; Editor, Allyn B. Tunis, New York, N. Y.; Managing Editor, None; Business Managers, None.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereafter the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

American Gas Association, 420 Lexington Avenue, New York, N. Y.; President, Arthur Hewitt, 420 Lexington Avenue, New York, N. Y.; Vice-Presidents, N. C. McGowen, Howard Bruce, 420 Lexington Avenue, New York, N. Y.; Treasurer, Wm. J. Welsh; Managing Director, Alexander Forward, 420 Lexington Avenue, New York, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding one per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner, and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is . (This information is required from daily publications only.)

ALLYN B. TUNIS, Editor.

Sworn to and subscribed before me this 23rd day of September, 1933.

(Seal)

LAWRENCE P. BROWN,  
Notary Public, New York County,  
Clerk's No. 330, Register's No. 4-B-566,  
(My commission expires March 30, 1934)

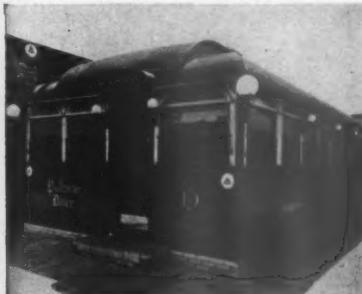
## MANUFACTURERS' SECTION

JOHN A. FRY, Chairman J. SCOTT FOWLER, Vice-Chairman C. W. BERGHORN, Secretary MERRILL N. DAVIS, Vice-Chairman

Gas Is Important Factor  
in the Roadside Diner

**T**ODAY, as we drive about the country, we see the sign "Roadside Diner" but in the old days, the sign just said "Lunch Wagon," and was patronized generally by truck drivers, factory workers, mechanics and others who had to eat, yet whose attire or personal appearance was such that they would not be welcome guests in the average restaurant or hotel dining room. However, today where the sign reads "Diner" instead of "Wagon," they still do a good business with the class of customer already mentioned, but in addition, we find many eating in the "Diners" who park their Packard or Rolls-Royce nearby and enter

*Photo Courtesy of Jerry O'Mahoney, Inc.*



*Exterior view of roadside diner*

the "Diner" to get a good wholesome and well-cooked meal.

It might surprise many who have never eaten in one of these places, what a really fine meal you can get, and at a very small price.

The operators of these "Diners" buy only the best food, for which they pay cash. They purchase each day for the day's needs so you are assured of the food being fresh. Most everything they serve is cooked to order while you wait and is cooked within your sight. Some, however, prepare a regular course dinner and keep it hot in the steam table, ready to be served. They, in this case, do not cook great quantities that would last all day, but cook in moderate quantities and then cook an additional supply as needed.

These dining cars are manufactured by several car builders in various parts of the country. The price of a small car runs from \$6,000 to \$15,000 depending on its size and furnishings.

<sup>8</sup> Member of the A.G.A. Hotel and Restaurant Promotional Committee.

By C. H. French\*

Manager, Hotel Department  
Standard Gas Equipment Corporation

Dining cars are sold to all types and classes of people. There are hundreds of occupations and professions represented by the dining car operation. It is known that professors, bankers, teachers, railroad superintendents, hotel managers, restaurant men, bond brokers, realtors, grocers, clerks, accountants, merchants, policemen, and actors have entered this business and have become happily located in different communities and are enjoying a successful business of their own. The usual satisfaction expressed by the operator is that they own and operate a business of their own and are free from the worries of losing their jobs either due to the fact that they will be replaced by younger men or else the spectre of economy doing away with their jobs.

Information given shows that over 70 per cent of the "Diners" purchased are to people who have never had any experience operating eating places. Dining cars are purchased for cash or on easy terms, viz: a reasonable down payment and the balance in monthly installment notes.

Dining cars have been very successful due to the fact that they are efficiently laid out whereby the workman saves a great deal of effort. For instance, a short order man not only cooks the food but he serves it, acts as a cashier, and if necessary is able to wash the dishes in the sinks which are located under the counter. This also applies to the cook and any other men who are working in the diner.

The price of large "Diners" varies according to size and type of equipment used. For instance, a high class "Diner" 40 ft. by 10 ft., 6 inches (19 stools) would cost approximately \$9,500 whereas a 40 ft. by 12 ft., 6 inches (18 stools and 6 tables) would cost \$13,000. Larger sizes built to order with special finish and equipment would run as high as \$22,000.

The dining car business is somewhat analogous to the automobile business, inasmuch as there is a certain amount of taking in of older and smaller cars in trade on new and larger diners. Diners taken in on trade are reconditioned and re-equipped and when completed, look like new. These cars give a man with less capital an opportunity of purchasing a diner as the down payment requirements are less, due to the prices being smaller.

*Photo Courtesy of Jerry O'Mahoney, Inc.*



*Glimpse of gas-equipped roadside diner*

All Dining Cars come fully equipped with dishes, silverware, menu racks and cooking utensils and are ready for business after they are set up on location. The usual cost of setting a car on a site amounts to about \$1,000. This covers transportation, brick foundation and hooking up of all the plumbing with water, sewer and gas mains.

Some of the heavy duty equipment which is furnished with dining cars include heavy duty gas range, short-order range and griddle, steam table, hot water heater, two coffee urns and one hot water urn.

The owners oftentimes install gas burning radiators for heating purposes. From an electrical consumption point, the equipment usually furnished amounts to four or five ventilating fans with each diner and a generous amount of lighting equipment, both on the interior and exterior of diner. The operator also purchases toasters, electrical refrigerator systems, radios and oftentimes electrically propelled cash registers.

Approximate fuel and light consumption of each "Diner" in dollars and cents are gas—\$65 to \$100 per month, or electricity—\$25 to \$65 per month. Gas and electricity accounts are about 5 per cent of the gross receipts.

Range of business done in diners runs from \$450 to \$1,500 per week. There are exceptional diners that reach as high as \$2,000 per week. Taken in all, they average about \$550 per week.

A properly operated dining car should net for the owner 25 per cent profit per week. This is clear and above his overhead and all payments.

The average dollar taken in by a dining car is broken up as follows: Provisions 42c; salaries 19c; gas and electric .05c; rent .04c; depreciation and operating costs .05c; net profit 25c.

The ground rent at today's figures runs from \$20 to \$150 per month depending on the location.

These diners are open for business twenty-four hours a day—365 days a year, and during this time there is gas being burned for some purpose in large or small quantities.

From the gas company point of view, this type of consumer should be a very valuable and profitable one. Most of these "Diners" are located on the main traffic street or highways so as to get the travelling public. Usually they try to locate the diner where manufactured or natural gas is available. However, if the location selected cannot be reached by the gas mains, they use compressed or tank gas. Where appliances are installed for use with tank gas they can be readily changed over to the other, if, at a later date, manufactured or natural gas is available. The site selected for some of the "Diners" is very picturesque, and the taste displayed in the painting of the car, with attractive awnings, shrubs and lawn around it, certainly makes it inviting for the hungry wayfarer.

varnishing of large vats, and gas-fired branding machines stamp the names on all beer cases and kegs. Some plants which might not have enough steam capacity for peak loads could install gas-fired high-pressure steam boilers or immersion heaters.

### Succeeds Mr. Toal

ERLING B. STOCKMANN, who has been acting purchasing agent of the Consolidated Gas Company of New York since the death of D. C. Toal, in June, has been appointed purchasing agent, according to an announcement by Oscar H. Fogg, vice-president. The appointment of Frank H. Walsh as assistant purchasing agent also was announced.

### Chance for Business in Italy

UIGI CRESPI, Via Card. Federico 3, Milan, Italy, has advised the Association that he has been established for several years in that city selling and installing gas appliances, and is desirous of being furnished with catalogs, prices and shipping terms of American-made gas-fired boilers, water heaters, ranges, incinerators, etc.

### Pipe Coating Division Moved to New York

THE Barrett Company last month announced the transfer of its pipe coating department from Chicago to the home office, 40 Rector Street, New York, N. Y. George W. McComb will continue as sales manager of the department with headquarters in New York.

### Brooklyn Sets Record in Refrigerator Sales

A all-time record for weekly retail sales of gas refrigerators by The Brooklyn Union Gas Company, Brooklyn, N. Y., was made by its salesmen during the week of September 11-18, it was announced by Hugh Cuthrell, new business manager of the company. Mr. Cuthrell also reported that more than 5,000 gas refrigerators had been sold by the company during the first five and a half months of this year, or more than three times as many as were sold in the same period a year ago.

During the record week a total of 363 air-cooled refrigerators were sold to individuals which compares with a total of 270 sold during the company's previous record week, April 23-27, when the company's pre-summer retail selling campaign was under way. During the record week of June 17-24 in 1932, the company's big year in gas refrigerator business, the retail sales totalled 102 boxes.

### ONE WEEK'S BUSINESS OF AVERAGE PLACE

	Sales			Summary	
	Day	Night	Total	Sales for Week	\$585.39
Sun.	\$45.40	\$23.35	\$68.75	Sales for Week	\$585.39
Mon.	55.75	20.85	76.60	EXPENDITURES:	
Tues.	54.17	33.70	87.87	*Week's cost of food	\$244.27
Wed.	61.35	18.60	79.95	" salaries	100.75
Thurs.	58.55	24.15	82.70	" expense items	26.70
Fri.	63.75	30.50	94.25	Elec. Refrigerator Deferred	
Sat.	53.07	42.20	95.27	exp.	9.66
	Total Sales for Week			" Sign and Fixtures	3.03
	\$585.39			(1/4 Month's rent \$25.00)	
				(1/4 Month's cost gas &	
				elec. \$20.00)	
				(1/4 Month's contract \$25.00)	70.00
				Total Expenditures	\$454.41
				Net Profit	\$130.98
*Note—This cost report is designed on the assumption that inventories of food left over every week run fairly constant and therefore can be omitted from the report. If you prefer to use the inventory method, see instructions on back of sheet.					

### Gas in Modern Breweries

GAS is used in a modern brewery for steam processing and cooking various grain mixtures, for bottle washing and beer pasteurizing. Some breweries use gas for all of this work while others use it for only part of the process. A typical brewery will use gas for the pitching machines, keg preheaters, vat dryers,

torches, and branding machines. Where small quantities of bottled beer are kept for sampling and testing, the gas refrigerator could be used to advantage. The gas-fired pitch heaters melt down the pitch used in lining beer containers, and the keg preheaters dry and warm up these containers before the pitch spraying. Vat dryers are used in connection with the

## NATURAL GAS DEPARTMENT

FRANK L. CHASE, Chairman

A. E. HIGGINS, Secretary

JOHN B. TONKIN, Vice-Chairman

## Safety Precautions While Making Volume and Rock Pressure Tests

CONSIDERING the various methods employed in making volume and rock pressure tests of gas wells, the old pitot tube method of obtaining open flows is undoubtedly fraught with more dangers than any of the more recent methods. This would quite naturally follow, as the origin of the pitot tube method dates back to a time when "Safety First" consisted mainly of trying the medicine on the family cat, and a cursory glance up and down the railroad track. The later methods, developed with an eye toward greater accuracy and conservation of a valuable product, also considered it from a standpoint of safety.

When preparing to make a pitot tube test of a gas well, the first consideration of the operator should be, "Are the gate valves and connections of adequate strength? To the uninitiated it would seem obvious that they are, as they are satisfactorily confining the pressure, but such is not always the case. When a gate starts to open with atmospheric pressure only on the outlet side of the valve, and perhaps as much as 1,500 to 2,500 pounds to the square inch, or whatever the pressure of the well may be, on the inlet side, much additional stress is put on the gate which might cause it to blow up. The possibility of a gate valve blowing up while being operated is increased considerably in very cold weather as low temperatures have a tendency to crystallize the metal. A good many of the extremely high pressure wells are equipped with extensions from the master gate wheel to a safer point some considerable distance away, preferably behind an embankment or protecting wall of some sort. The extension consists of a clevice bolted to the gate wheel, with a length of welded pipe extending to the point desired where the gate can be opened by the use of pipe tongs.

We have found that a few well owners (happily they are in the minority) either from the standpoint of economy or ignorance, or both, will complete a gas well with valves of inadequate strength, fail to note that the fittings are not screwed in the necessary distance, and an insufficient number of anchor clamps strengthening the equipment. As an explanation of the phrase "From the standpoint of economy or ignorance," I refer to a condition which existed up until a few years ago, in that some gate valve manufacturers marked their product with a figure indicating the pressure test of the gate valve which was nearly double the actual working pressure to which the valve could safely be subjected.

The master and "blow-off" gates should

By W. A. Hazard

Assistant Chief Engineer Operations, Oklahoma Natural Gas Corporation, Tulsa, Okla.

be of the same size as the casing through which the flow comes, as any "swedging" down to a smaller size creates a stricture at which point the well may "bridge" or become closed, if the flow of gas brings shale, sand or rock in sufficient quantities, and the resultant shock caused by the sudden stoppage of the flow may split the pipe or blow the connections off. For the same reasons, the operator should be certain that the gate valves are fully opened.

Before opening a well, the men engaged in the work should protect their ears in every manner possible, as the terrific noise and vibration, when a well is first opened, will eventually affect the hearing, and sometimes result in split ear drums. One very effective method of protection consists of first inserting a small wad of cotton well inside the ear and sealing it over with ordinary compression grease or hard oil. This will reduce the noise and vibration to a minimum. We have also tried a small soft rubber vacuum cup, fitting it inside the ear, but find that the vibration will usually dislodge it.

Matches, of course, or any lighting device that will cause a spark or fire must not be carried by any man while blowing a well. There are several reasons for this, a match may fall on the derrick floor or ground and be stepped on, causing it to light, the danger of matches igniting from rubbing together in the pocket, and last but not least, there is sometimes a man who will thoughtlessly light a cigarette while still in the danger zone. Care must also be taken in parking a car a sufficient distance from the well, in order that it may be started safely while the well is open, in the event the occasion should arise. The distance should also be governed by factors such as clear or foggy weather, wind direction and the location of the well with reference to its

This is the second of a series of articles prepared under the auspices of the Accident Prevention Committee of the American Gas Association in a cooperative effort with the National Safety Council to develop greater publicity on the safety practices in the natural gas industry.

position on a hill or in a valley. When blowing a well located at a low point, with a foggy atmospheric condition prevailing, a portion of the gas will stay close to the ground for some time, over a considerable area.

In a good many instances, we find that after the rig has been removed from a well, the gates to be opened will be at a height of as much as 12 to 15 feet above the ground, and it becomes necessary to erect a platform of sufficient size to insure safe footing for the men engaged in the work.

A number of gas wells, as a result of producing some oil or salt water, have a string of small pipe run inside the casing to draw off the fluid. This string of pipe is swung from a connection at the top of the well, making it necessary to blow the well through a side opening. When this condition occurs, it is very important that the well connections be securely braced as a terrific side strain is exerted against the connections, due to the fact that the gas is forced to leave the well at a 90-degree angle. When opening a well with a hookup of this description, the blow-off gate should be opened very slowly to allow the head pressure to escape over a period of time, and thus decrease somewhat the side strain which otherwise would be excessive, if the gate were opened quickly. The same procedure should be followed on all wells having any connection which deflects the flow of gas.

Up until a few years ago, when taking the open flow of a well, it was customary for the operator to hold his test tube over the flow nipple with his hands, while balancing himself more or less precariously on the master gate or some protruding connection. This dangerous method has been remedied by welding the test tube to the flow nipple with a connection extending to the ground where the operator can easily obtain his reading.

A well with a rig over it should not be blown if it is possible to avoid it, especially if the rig is of steel construction, as any gravel, rock or other formation may strike a spark at a point where the mixture is sufficient to ignite. If the rig is constructed of wood, all piping, crown sheaves, or anything that could cause a spark should be removed, as well as any loose lumber, which might be blown off.

When taking a rock pressure test of a well, the operator should assure himself that the pressure gauge is screwed well into the test stop or valve.

## PUBLICITY AND ADVERTISING SECTION

HENRY OBERMEYER, Chairman

ALLYN B. TUNIS, Secretary

JOHN F. WEEDON, Vice-Chairman

## Publicity and Industry\*



Col. W. M. Carr

A N Englishman who ventures to address an American audience on publicity needs almost as much nerve as would a Mohammedan pilgrim from a distant land who, on reaching Mecca, lectured the Faithful there on religious practices. Publicity is playing a rapidly increasing part in British industrial life, but I should be impudent if I thought we can teach America anything on the subject. There is, further, the fact that the gas industry works under somewhat different conditions in the two countries. Thinking it over, I felt it would be best if I simply wrote down what I would say to a British audience of gas men and hoped that this might be of some interest in America if only because of the differences that might be revealed between our problems.

It would have been an honor and also a keen pleasure for me to have been able personally to deliver this paper. Some of my pleasantest memories of publicity work are of Canada and the United States and I should have valued highly the chance of meeting members of the gas industry in America.

"DOLLAR-A-MINUTE GAS MAN COMES TO NOSUCHVILLE"

"NEW MANAGER HIGHEST PAID STAR IN THERM INDUSTRY"

"All citizens of Nosuchville will be delighted to hear that in future, every Therm of gas they buy will have been personally supervised by N. Gineer who has just been engaged by our enterprising undertaking at a record salary for the gas industry anywhere in the world. . . ."

I give this so highly imaginary extract from a non-existent newspaper, because it brings out one of the most important points to be remembered about publicity. You cannot generalize on this in-

\* Address before the Publicity and Advertising Section, American Gas Association Convention, Chicago, Ill., Sept. 26. In the absence of the author, the paper was read by Colonel W. M. Carr, vice-president, The Institution of Gas Engineers and general manager and clerk, Stretford and District Gas Board, Stretford, England.

By A. P. Ryan

Publicity Manager, The Gas Light and Coke Company, London, England

triguing subject without, first, emphasizing the great gulf that yawns between various industries in facing their problems of public relations. The cinema, apparently, finds it profitable to advertise that some of its employees are paid fantastic salaries. People will go to see a picture because they have been told that a performer earned more than can possibly be good for him (or her). But the same people would not be tempted to make most other purchases by a similar gambit of publicity. On the contrary, they would at once set up a howl about the price of the commodity concerned. Yet they do not ask for cheaper stars—and, therefore, cheaper seats—at the cinema.

Every business does (or should), of course, pay highly for leadership and talent, but it would, as a rule, be fatal to pay too much and to boast of such extravagance. I have quoted an exception to this rule, since its shows in extreme form, the danger of generalizing about publicity. This warning having been uttered, I shall now venture to generalize.

Fifty million pounds were spent last year, according to a very modest, reliable estimate on advertising in Great Britain. Much higher figures, even £250,000,000—have been given and it is not easy to be exact over so complicated a calculation. Advertising uses many media. The daily, weekly and periodical press and the hoardings account for a lion's share of expenditure, while some money is spent by British advertisers on the cinema or broadcasting. The financial side of these activities can, at any rate, roughly be estimated on a national basis. There remains, however, an enormous area not covered by the £50,000,000. Pamphlets, leaflets, window displays, show cards and other aids to sales are obviously publicity material and, as they are the private affair of the thousands of firms that use them, it is quite impossible to guess at what they cost in the aggregate. Further, a very considerable and an increasing expenditure is incurred at points which lie on the border line between general policy, sales and specific publicity. Let me give a few examples. A firm employs a well-known expert to decorate its showrooms or to advise on the lettering for its account forms or for its vehicles. Again, distinguished visitors or

the public at large are invited to visit a factory; some undertakings, including many in the gas industry, make a regular practice of showing parties around their works. It is not always easy for a single firm to allocate to publicity all its expenditure that might be placed under that heading. How impossible it is, then, to put forward a national figure.

Fifty million pounds is only the foundation upon which we may build, with apprehension or with pleasure, according to our point of view, financial skyscrapers of almost limitless altitude. Even when expressed in another way, as less than 4d. in each £ of British income, £50,000,000 is a lot of money. We in the gas industry contributed only a modest fraction of it. But we advertise through many channels, and so it seems worth while to ask ourselves what value we get from our expenditure. An occasional halt in the march of daily, detailed routine business is, I believe, valuable; by taking a general survey of our route, we can help ourselves to progress more efficiently when we get back into the road.

*The Cinderella of Industry*

Publicity is part of the machinery of Distribution and Distribution is still the Cinderella of industry. I do not say that Management and Production are the two Ugly Sisters; rather they are the elder but no less eligible members of the family. Mass Production has a long tradition behind it and it has been brought, if not to perfection, at least to a marvellously high standard of excellence. Mass Distribution is still young. Marketing and salesmanship on the scale that the modern world demands are not yet fully understood. Those of us who are engaged in distribution—and we include all sales and publicity men—are, in a sense, pioneers of industry. We are making our own traditions and working without old established rules. That is why, to my mind, distribution is the most fascinating job in the modern world.

The Sales side of big businesses, although youthful, has more experience behind it than has publicity, which is nevertheless, its twin—almost its Siamese twin, the two are often so hard to separate. A definition of Sales would be outside my present scope, but here is one of publicity. *It means telling people the truth about your business in so far as it concerns them and making it interesting.* I ask you to examine that sentence very carefully, because every word in it is of

practical significance in helping to make publicity our efficient servant.

First, telling the truth; let there be no mistake about that. I do not deny that temporary success in sales may sometimes be achieved by telling lies or distorting facts (which is much the same thing as telling lies). But no great industry or commercial enterprise can achieve success except on the basis of being absolutely truthful about what it has to offer. That is putting the matter on its lowest plane. As a publicity man I may be allowed to add that you will not get any one who is keen and competent at his work to play tricks with the truth. I mention this because it affects the whole area of publicity. Happily, it has no practical bearing whatever on the problems of the Gas Industry. The Gas Industry sticks to nothing but the truth. It has a magnificent true story to tell and it has leaders who would forbid it to tell anything else.

*"They Don't Want To Read It"—*

Now to come to the second point in my definition—telling people the truth about your job *in so far as it concerns them*—please mark, especially, that "in so far as it concerns them." It is the first instinct of any one who loves his own trade to assume that every one else will love it in detail as he does. This is a healthy instinct in itself, but it is suicidal to publicity. When you are beginning to think what you will tell the public you must tell yourself at the outset that the public is a much distracted man and woman with very little time to spend on your affairs, and no predisposition whatsoever to spend any time at all on them. Do not, therefore, anticipate that people will know anything about your business however commonplace it may seem to you. It is no concern of theirs and, so, the chances are that they have never bothered about it. *"They don't want to read it"* is a warning kept permanently on the desks of all wise publicity men. Let us check this by considering what the man in the street knows, or, rather, does not know about the gas industry. He does not know that he ought to say "gasholder" instead of "gasometer." He would not understand you if you talked about "radiants," although he is familiar with the objects themselves and thinks they are made of asbestos. Phrases like "on the district," "calorific value," "products of combustion" and "retort houses" are Greek to him. If you asked him to distinguish between the gas he gets through his meter and "coal gas," "town's gas" and "water gas" he would be stumped for an answer. If he was told that his gas undertaking possessed a "Booster House" he would, I am sorry to say, think that you were referring to its publicity department, for "boost" has only one meaning to the layman, and one that has nothing to do with engineers.

Does the man in the street even know that gas and electricity are in Great Britain made from coal or, if he does, what

about his wife? If every gentleman in this room took a census of the women in his area of supply, what percentage of them would be able to say that gas and electricity are made from coal? Many of you will, no doubt, protest that really I am going too far and that, of course, all the world and his wife at least know this childishly simple truth. Well, I have no figures to back me up—and nor have you. Let us leave it there, while agreeing on the main point that no limits can safely be set to public ignorance of any industry. People do not naturally bother, I repeat, about what does not directly concern them. The practical use of keeping this fact before one in all publicity is twofold: First, it enables one to guard against allowing an idea, a phrase or even a word that will not be understood to creep into publicity material. Nothing kills interest so quickly as the introduction of the unintelligible and, remember, people do not tell you they have not understood your advertisement—they just let it drop out of their minds: Secondly, it forces one to select from a mass of technicalities, those aspects of one's industry that can be shown to concern the public.

*Advertising to One's Self*

Here is a wide field and to enter it brings me to the last part of my definition of publicity—making whatever one says interesting. How obvious that sounds and how often it is not acted upon.

Three parties are concerned with every advertisement:—those who pay for its production, those who produce it and those whose spending power it is intended to influence. This state of affairs creates certain pitfalls. Two of the three parties—manufacturer and advertising agent—consult and confer, while the third party—the public—is never present until it is too late for him to do anything except register his opinion on the finished advertisement. In theory it is easy to keep in mind that the absent partner is the one whose decision makes for success or failure. In practice, manufacturer and agent, being human, are apt to please themselves. The one, proud of his factory and his products, wants to have their technical virtues extolled in print and picture. Once he lets himself go along this attractive line, he is liable soon to be out of the public's depth. His agents, if they are weak or cynical, may let him rip and the result will be an advertisement to please the Board Room and bore the public. Agents, again, without being either weak or cynical may allow their own professional enthusiasm to run away with them. It is hard for a man whose trade is words or drawings to scrap what seems good in his eyes and likely to provoke admiration among other writers or artists, because it won't help to sell something. As many advertisements fail through too much cleverness as through too many technicalities. How tempting

it is to advertise one's self: What lots of advertisements appear for all sorts of commodities that have so evidently given pleasure to those who paid for them or those who made them and that will so evidently die of public neglect.

*Amateurs in Advertising*

If your publicity appropriation is to be well spent, you have to fix clearly in your eye the people you are seeking to interest and, then, to tell your story in a way that will persuade them they are missing something valuable if they do not listen to you. Every advertisement ought to be scrutinized from this point of view and none should be passed if it falls short of this standard. *A man who is quite ignorant of the industry but knows how to write is, as a rule, better than any one in the industry at preparing an advertisement. It is almost impossible for those who are steeped in the atmosphere of an industry to speak about it interestingly to the public. Writing is a highly technical business. You would not employ an amateur as an Engineer. Your danger of breakdown will be no less great if you have your advertisements written by unprofessional hands.*

Let me offer a few tests of whether an advertisement will influence the mass of people for whom it is meant and who DON'T WANT TO READ IT:

1. Do you, although you know nothing and care nothing about the subject find yourself interested as soon as you open the page of a newspaper in which it appears, or slit the envelope from which it dropped, or pass the hoarding on which it is displayed?

2. Do you, once your interest has been caught, find yourself reading on and understanding what is said, exactly and easily?

3. Do you feel that those responsible for it really believe every word they have written and every picture they have drawn? Insincerity is absolutely fatal to effectiveness in an advertisement.

4. Does it definitely invite the reader to take action? That is to say, does it leave him wanting to buy something, knowing where he can buy it and how much it will cost him? All advertisements need not pass his particular test since some of them, may legitimately provide a favorable background for specific sales.

5. Is it driving home a message that has been made public before? I put in this point not, of course, because all advertisements should say something that has been said in the past, but as a warning against a very general tendency on the part of advertisers to get tired of what they are saying. Don't think that because you said something in public last week or last year and naturally remember it yourself, that everybody else will necessarily remember it too. A message is often only beginning to get home when those who are sending it out are getting tired of it. Repetition is an in-

tegral part of publicity, just as "follow through" is as much a part of a successful stroke at golf as is the approach and the actual striking of the ball.

*Gas—An Industry Revolutionized*

Where does the gas industry come into the focus of this picture? It should, I believe, come prominently into the foreground. No industry needs publicity more continuously and none has a better story to tell. We have to keep two distinct aims before us in enlisting public interest. Our industry has a long record behind it of which it is justly proud, but, much more significant, from the publicity angle, is its position in the present. *The modern gas industry has hardly greater kinship with its past than has the modern oil industry with the days of the oil lamps.* Our gas works are triumphs of scientific post-war production. Our engineers and chemists treat coal in a manner undreamt of by their predecessors. "Gas Works" is a most inadequate term for the complication of chemical processes of economic value to the modern world that go on in our works and are all based on British raw material, coal. We in the industry all know this, but all the public do not and we should never forget that the prestige of our industry depends to a very considerable extent on our using publicity to keep people abreast of our progress.

Against that background, we can advance our direct sales campaigns, always striving to put novelty and interest into our announcements, and here, too, remembering that we are more aware than is the public of our recent advances. It is no use our saying we sent out a leaflet about our latest appliances at such a time or put an advertisement out the other day in our local paper. The test is:—Do our customers as a whole know what we can offer them and why it is worth their while to come to our showrooms and see for themselves? Until our publicity can pass that test, it has not done its duty. Perhaps there has not been enough of it or, perhaps, it has not been planned with adequate freshness, drive and concentration. Let us keep on looking at it so far as possible through the eyes of the public.

Finally, let me ask you to take your publicity very seriously indeed. This, like so much I have said, sounds obvious, but there is a pretty general tendency in business of all sorts to regard publicity as no more than a series of stunts. Some people are even a bit doubtful in their hearts as to whether it is quite dignified. They hate the idea of trumpet blowing and, despite the tributes paid to publicity in speeches, there remains a suspicion in many good minds that it smacks of trumpet blowing. If these remarks have had any effect, they will have shown that publicity is an entirely desirable and an absolutely necessary part of modern industry. My hope that they have done so is reinforced by the fact that the gas in-

dustry, wisely recognizing many years ago that publicity must serve it, proceeded to take very efficient steps to translate this recognition into practice. The

British Commercial Gas Association has done remarkable work for a quarter of a century and its work is only just beginning.

Confer Charles A. Munroe Award  
upon Dr. W. R. Hainsworth

American Gas Association  
Charles A. Munroe Award

This is to certify that  
the Charles A. Munroe Award has been conferred upon

William Richard Hainsworth, Ph.D.

for the most outstanding recent contribution by an individual  
to the advancement of the Gas Industry.

By action of the Executive Board September 25, 1933

Alexander Forward  
Managing Director

  
President



Dr. W. R.  
Hainsworth

RECOGNITION  
of distinctive  
achievement in making  
a marked contribution toward  
the advancement of the  
industry was con-  
ferred upon W. R.  
Hainsworth, Ph.D.,  
director of research,  
Electrolux Refrigerator  
Sales, Inc., New  
York, N. Y., at the  
annual convention of  
the Association, in  
Chicago, September

28. It was Dr. Hainsworth's research that developed and perfected the air-cooling unit for the gas refrigerator, which has placed in the hands of the industry an automatic device for domestic use said to be the most satisfactory yet conceived.

In recognition of Dr. Hainsworth's labors and ingenuity, he was presented with one of the association's coveted honors—the Charles A. Munroe Award, which only is granted for noteworthy and meritorious service. It consists of a substantial finan-

cial acknowledgment and appropriate certificate.

The presentation to Dr. Hainsworth was made by Charles A. Munroe of New York, a former president of the association, whose generosity made possible the award which bears his name.

Dr. Hainsworth was designated to receive this honor by the Charles A. Munroe Award Committee, whose recommendation was approved by the Executive Board of the American Gas Association. The award committee is composed of the following members: A. J. Gonnoud, president, Kings County Lighting Co., Brooklyn, N. Y., chairman; A. B. Tenney, vice-president, Charles H. Tenney & Co., Boston, Mass., and N. C. McGowen, president, United Gas Public Service Company, Houston, Texas.

Dr. Hainsworth is a native of Seattle, Washington, a graduate of chemistry with the Degree of B.S. from the University of Washington; M.S. from the California Institute of Technology, and he earned his Ph.D., at the Massachusetts Institute of Technology. Dr. Hainsworth has devoted most of his professional life to the refrigeration field and entered the work upon which he now is engaged in 1926.

## TECHNICAL SECTION

O. S. HAGEMAN, Chairman

H. W. HARTMAN, Secretary

C. A. HARRISON, Vice-Chairman

Reviews Conditions Before  
Technical Section\*

It is customary for the chairman of this section to make a few remarks before proceeding with the program.

I wish first to express my appreciation for the splendid work and cooperation of the chairmen of all of our Committees and their members, and particularly my obligations to the chairmen of the three main committees—Mr. Harrison of the Distribution Committee, Mr. Eddy of the Production Committee, and Mr. Murphy of the Chemical Committee.

Also I should mention at this time the full assistance and cooperation always cheerfully and readily given by our headquarters staff through Major Forward, Mr. Hartman and others.

We can feel proud and gratified with the interest and the results of the Distribution Conference held at Pittsburgh, in April, and the Joint Production Committee and Chemical Committee Conference, held at New York in May.

These conferences are particularly valuable to the technical men and the companies they represent, because of the many important subjects presented and discussed in detail. In order that those unable to attend these conferences may secure some advantage from them, we have arranged as a part of our program, this year, to have Mr. Harrison, Mr. Eddy and Mr. Murphy present separate reviews of the Distribution, Production, and Chemical developments.

This fifteenth A.G.A. Convention is also the second International Gas Conference. At the general sessions this morning we had the pleasure of welcoming delegates from other countries and of listening to the splendid addresses delivered by their representatives. I wish to extend to them a cordial welcome and invitation to participate in our program and discussions. We are to have the pleasure, later on, of listening to a paper on "The Preparation of Coke For the London Market" by F. M. Birks, of the Gas Light & Coke Company of London.

As a means of concentrating your attention on outstanding developments, economies and problems of the technical side of the industry, I shall give a brief review of our present conditions.

## 1. Carbonization Plants

The past five years do not show much change in the type of coal carbonization

\* Opening Remarks at Technical Section Session, A.G.A. Convention, Chicago, Ill., Sept. 26, 1933.

By J. A. Perry

Chairman

plants. Low temperature processes, in this country, appear to have been definitely abandoned as uneconomical and unsound. There does not appear to be much future change in present carbonization processes until when and if some newer and better construction materials have been developed.

## 2. Carburetted Water Gas Plants

The past five years have shown considerable development of processes and economies of operations.

Mechanical self clinkering generators have been perfected and accepted by the industry. New operating methods, such as the production of oil gas on carburetted water gas sets, the production of gas with the use of heavy residuum oils, the reforming of gas from heavy oils, and the reforming of refinery oil and natural gases have been developed and perfected and are in general use.

Under present cost conditions for crude materials, a careful study of these developments is likely to point the way to a considerable reduction in the cost of producing gas.

## 3. Mixed Gases

Through research and tests we have learned how best to mix the various gases that are available so as to take advantage of opportunities to use gases that will reduce our production costs and at the same time render the same satisfactory service that can be secured through the use of a gas of one variety or process.

## 4. Utilization of Refinery Oil Gases and Natural Gases

Two large plants are now using and reforming refinery oil gases on water gas sets, largely displacing the coke and oil heretofore used. The oil refineries appear to be sources of large and continuing supplies of gas ranging from 1,300 B.t.u. to 1,700 B.t.u. per cu.ft. It would appear advisable where such gas is available to study out its best use, even to the extent of adopting a higher B.t.u. standard than the usual 525, if this should be more economical or advantageous.

## 5. Use of Carburetted Water Gas Plants for Augmenting Peak Loads of Natural Gas

The industry appears to have developed several satisfactory methods of using, through modification or otherwise, our existing carburetted water gas apparatus for the production of a high B.t.u. gas of satisfactory gravity and composition for augmenting the peak load demands for natural gas.

## 6. Purification

Further progress in liquid purification developments is a part of our program. The most baffling and interesting problem has been and continues to be the gum problem. This appears also on our program. Fortunately, we now seem to be making rapid progress toward a satisfactory solution of this problem, through removal of the oxides of nitrogen from the gas at the plant, and also through the use of new developments which give us pilot controls that do not stop up with gum. Pilot controls also appear on our program.

## 7. Distribution

The continued use of higher pressures and longer distant transmission mains has brought to the fore the development and perfection of mechanical joints that should prove satisfactory for use on cast iron mains for pressure and transmission purposes as well as ordinary distribution purposes. Gaskets have been developed that will stand up under manufactured gas as well as under dry natural gas. Methods are also being developed for the protection of bolts so that the life of such mains and joints should be as long as the ordinary cast iron mains heretofore generally used.

## 8. The Outlook

In conclusion, it would appear to me that the developments and progress made during the last five years have been as great or greater than any previous ten- or fifteen-year period of the past thirty years. That we need not look for extremely radical or revolutionary processes of carbonizing coal or of generating gas, but we can with our usual interest and optimism continue to watch and to determine on improvements and economies here and there with assurance that the gas industry will function as a very important part of our economic life.

# Monthly Summary of Gas Company Statistics

## FOR MONTH OF JULY, 1933

Issued September, 1933, by the Statistical Department of the American Gas Association  
420 Lexington Avenue, New York, N. Y.

PAUL RYAN, Statistician

### COMPARATIVE DATA ON THE MANUFACTURED AND NATURAL GAS INDUSTRY FOR THE MONTH OF JULY, 1933

	Month of July			Seven Months Ending July 31		
	1933	1932	Per cent Change	1933	1932	Per cent Change
<i>Customers</i>						
Domestic (Including House Heating).....	14,320,000	14,708,200	— 2.6			
Industrial and Commercial.....	933,700	949,800	— 1.7			
Total .....	15,253,700	15,658,000	— 2.6			
<i>Revenue (Dollars)</i>						
Domestic (Including House Heating).....	32,413,300	35,579,200	— 8.9	303,489,600	329,795,000	— 8.0
Industrial and Commercial.....	13,814,300	13,147,500	+ 5.1	109,294,100	117,203,300	— 6.7
Total .....	46,227,600	48,726,700	— 5.1	412,783,700	446,998,300	— 7.7

### COMPARATIVE DATA ON THE MANUFACTURED GAS INDUSTRY FOR THE MONTH OF JULY, 1933

	Month of July			Seven Months Ending July 31		
	1933	1932	Per cent Change	1933	1932	Per cent Change
<i>Customers</i>						
Domestic .....	9,359,300	9,669,700	— 3.2			
House Heating .....	44,500	44,600	— 0.2			
Industrial and Commercial.....	480,500	490,300	— 2.0			
Miscellaneous .....	7,000	7,000	—			
Total .....	9,891,300	10,211,600	— 3.1			
<i>Gas Sales (MCF)</i>						
Domestic .....	19,025,700	21,158,100	— 10.1	146,080,800	159,893,500	— 8.6
House Heating .....	220,800	227,200	— 2.8	14,753,800	15,176,200	— 2.8
Industrial and Commercial.....	6,763,100	6,070,900	+11.4	46,996,900	49,802,800	— 5.6
Miscellaneous .....	119,500	124,400	—	1,103,600	1,169,500	—
Total .....	26,129,100	27,580,600	— 5.3	208,935,100	226,042,000	— 7.6
<i>Revenue (Dollars)</i>						
Domestic .....	23,224,300	25,934,400	— 10.4	174,004,300	192,096,500	— 9.4
House Heating .....	193,300	207,500	— 6.8	10,110,800	11,301,700	— 10.5
Industrial and Commercial.....	5,321,000	5,425,500	— 1.9	39,469,800	44,271,900	— 10.8
Miscellaneous .....	86,500	96,200	—	795,000	821,200	—
Total .....	28,825,100	31,663,600	— 9.0	224,379,900	248,491,300	— 9.7

### COMPARATIVE DATA ON THE NATURAL GAS INDUSTRY FOR THE MONTH OF JULY, 1933

	Month of July			Seven Months Ending July 31		
	1933	1932	Per cent Change	1933	1932	Per cent Change
<i>Customers</i>						
Domestic (Including House Heating).....	4,916,200	4,993,900	— 1.6			
Commercial .....	425,900	431,600	— 1.3			
Industrial .....	14,500	14,500	0.0			
Main Line Industrial .....	4,200	4,300	— 2.3			
Miscellaneous .....	1,600	2,100	—			
Total .....	5,362,400	5,446,400	— 1.5			
<i>Gas Sales (MCF)</i>						
Domestic (Including House Heating).....	9,168,400	9,773,600	— 6.2	180,012,500	189,611,300	— 5.1
Commercial .....	3,689,400	3,670,500	+ 0.5	54,540,300	55,074,900	— 1.0
Industrial .....	29,510,900	25,228,500	+17.0	189,500,600	192,302,000	— 1.5
Main Line Industrial .....	11,043,600	9,225,500	+19.7	73,218,800	64,345,400	+13.8
Miscellaneous .....	627,600	567,800	—	4,987,300	5,400,300	—
Total .....	54,039,900	48,465,900	+11.5	502,259,500	506,733,900	— 0.9
<i>Revenue (Dollars)</i>						
Domestic (Including House Heating).....	8,995,700	9,437,300	— 4.7	119,374,500	126,396,800	— 5.6
Commercial .....	1,824,000	1,852,000	— 1.5	24,665,100	25,671,600	— 3.9
Industrial .....	5,295,100	4,620,200	+14.6	35,687,200	38,077,500	— 6.3
Main Line Industrial .....	1,193,900	1,086,200	+ 9.9	7,849,200	7,520,900	+ 4.4
Miscellaneous .....	93,800	67,400	—	827,800	840,200	—
Total .....	17,402,500	17,063,100	+ 2.0	188,403,800	198,507,000	— 5.1

## Natural Gas Sales and Revenues Increase

**N**NATURAL gas sales for the month of July amounted to 54,039,900,000 cubic feet, an increase of 11.5 per cent over the corresponding month a year ago. Both the manufactured and natural gas groups reported a distinct upturn in gas sales for industrial purposes. Sales of manufactured gas for industrial-commercial uses showed a gain of 11.4 per cent for the month. Natural gas sales to ordinary industrial customers gained 17 per cent, while sales to large scale industrial users increased nearly 20 per cent.

Sales to domestic users continued to lag however, the consumption of natural gas by this class of customers in July running more than 6 per cent below a year ago, while sales of manufactured gas to domestic customers were down 10 per cent.

For the first time since April, 1930, natural gas revenues registered an increase over the preceding year, rising from \$17,063,100 in July, 1932, to \$17,402,500 in July, 1933, a gain of 2 per cent. As indicated, this resulted from marked expansion in industrial business, as revenues from ordinary industrial customers gained nearly 15 per cent, while revenues from large scale industrial users increased 10 per cent.

This marked expansion in sales characterized all sections of the country served with natural gas, with the exception of Texas, where sales for July were down nearly 13 per cent. In Oklahoma and Kansas sales gained from 22 to 27 per cent, while in California the increase was 16 per cent. Pennsylvania led the Appalachian region with an increase of 24 per cent in natural gas sales for July. In West Virginia and Ohio the gains ranged from 12 to 14 per cent.

## The Gas Industry in America

(Continued from page 404)

men who have given so freely of their time for the discussions and conferences which have resulted in such definitely helpful reports as have been presented from time to time to the general membership. The past year has been no exception in this regard; in fact, one of the major activities of the past year will be illustrated in a special report which will be presented to this Convention by the National Directing Committee of Executives, through its able Chairman, Mr. Conrad N. Lauer, and I would take this opportunity of urging upon the controlling executives of all member companies that they give their most earnest consideration and active support to the cooperative plans

which are being recommended by that Committee.

I desire to record an expression of sincere thanks to Major Alexander Forward, Managing Director of the Association, and to the members of his staff, for the kindly manner in which they have assisted me during my term of office. I want to confess that, with all my previous experience in Association affairs, I have been amazed this year at the tremendous volume and variety of work which has had to be overtaken at Headquarters, to keep pace with the demands made upon the Association by its members.

I close this address with two quotations which have impressed me. The sources are distinctly different, one from the other, but they convey the same idea. One is:

*"What practical moral is there for each of us in the fact that we cannot know the future? This: that we must take part in what is going on about us and not waste our forces in the contemplation of the unknowable, that we must act to the degree that each of us can, as our conscience and duty command."*

The other:

*"But the true secret of it all is, that we ought to live as far as we can in the day, the hour and the minute; to waste no time in anxious forecasting and miserable regrets, but just to do what lies before us as faithfully as possible."*

Let us face the future, not with unconquerable despair, but with a great hope.

## Gas Headed Toward Greater Service Throughout World

(Continued from page 409)

managers, to learn of your experience in technical and commercial operations and to see your great cities and towns. We shall return inspired, with pleasant memories and hoping that the good relations which have always existed between America and British members of the International Gas Industry will have been further cemented and enhanced.

## What Price New Business?

(Continued from page 427)

their competitors. This broadening of the field will also broaden the scope of the manufacturers' advertising and through the media of trade magazines published primarily for allied trades, bring the story of gas and the opportunities going with the sale of gas equipment to these trade bodies. A broadening of the field even at the comparatively insignificant sacrifice of merchandise sales volume will bring additional installation and service work to allied trades and thereby strengthen the entire industry.

To meet the intense competition of the immediate future, we must adopt policies which will take full advantage of every gas sales promotional weapon available. It should be fundamental from the executive viewpoint that an approved appliance will give the gas company just as much added revenue, whether sold by the gas company or someone else. The efforts of a utility appliance sales department can, therefore, properly be measured in terms of estimated added revenue accruing from its own sales and those of cooperating dealers and manufacturers in the territory served by the utility. The members of it should be appraised and paid accordingly. It removes the political back-lash, for it effectively squashes those very things on which most of this sort of political opposition is based.

What I have said on this general subject is particularly true of the gas business, far more so than of the electric. In the electric end, we have a less critical condition. Electric appliances are much easier to sell. We have nothing in the gas business equivalent to the hundreds of small electric appliances that are sold in all kinds of retail outlets from corner drug stores to music shops. Even in the equivalent fields such as refrigeration, for example, the popularity of the electric refrigerator induced by manufacturer's sales promotional budgets, themselves larger than the gross revenue of all our gas refrigerator manufacturers, insures their continued sale whether the central station retails them or not. There is no such parallel in the gas field.

You gentlemen of the Commercial Section are our industry's new business specialists. You are charged with the responsibility of our future growth and you are expected to be fundamentally sound in your plans and decisions. The quality of your salesmanship is being challenged in these days and all of your suggestions for improved sales methods and advanced new business policies are being tested with industry fundamentals. From an executive viewpoint there is no better suggestion I could make to this body than to say that if you will watch the fundamentals, your success is inevitable and the price of new business will take care of itself.

## International Gas Parley Promotes Gas Progress

(Continued from page 410)

gas industry in technical and economic matters. For this reason it will help to create fraternal relations between the members, extending to all gas engineers the idea that good fellowship and friendship between colleagues (gas engineers) will lead to complete collaboration.

To make a personal contact between the members possible, the Union organizes periodical conventions. At these conferences, which will be averaged over a three-year period, problems of present interest will be treated by special reports, and papers by prominent specialists will be read.

At the second International Gas Convention which will be held in September, 1934, in Zurich, the following reports will be produced by the members mentioned below:

**Belgium**—Association des Gaziers Belges.

Methods for development of the industrial use of gas, including the hotel industry.

**Czecho Slovakia**

Systems of gas charges.

—Institution of Gas Engineers.

Methods for the development of the use of gas for domestic purpose.

**France**—Union Syndicale de l'industrie du Gaz en France.

Coordination of methods of testing gas appliances.

**Germany**—Deutscher Verein von Gas und Wasserfachmännern.

Coordination of the methods of testing and guaranteeing gas-making plants.

**Switzerland**

System of carcassing buildings.

In addition to the reports mentioned above, prominent gas engineers and chemists will give most valuable papers.

So we hope the second International Gas Convention in 1934 will be very useful to our industry and we hope by and by to attain our aim

and help in the development of the gas industry and the best way to arrive at this will be the cordial collaboration of the gas engineers on a basis of real friendship. That is our aim and purpose and I sincerely hope you all will help us.

## Gas Industry Planning for Greater Sales

(Continued from page 420)

The plan was submitted as representing, in the Committee's opinion, the best method for financing program, and with the full recognition that the responsibility for determining the date of its application was left to the judgment of the Executive Board.

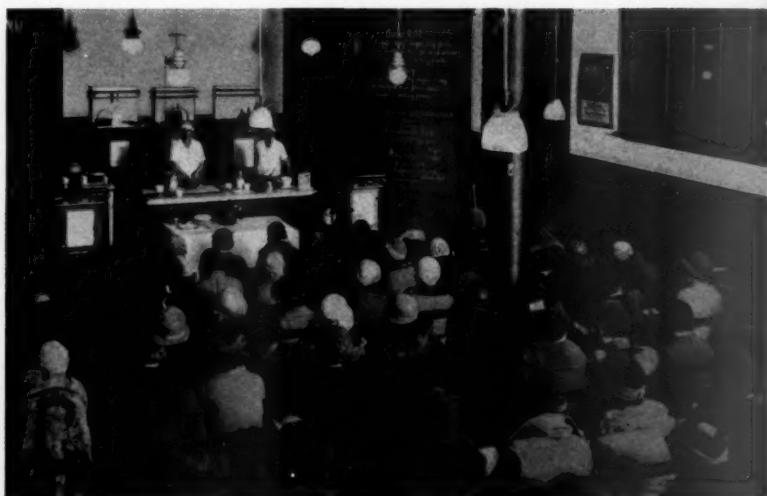
Due to the continued engagement of the attention of appliance and equipment manufacturers with the working out of national recovery code activities, and to the engagement of many utilities upon the same project with resulting uncertainties as to oper-

ating expenses in the near future, and in some cases as to rate structures, the Committee has not felt that the time is yet propitious to present its proposals to members of the industry for a decision. We would, however, urge you, in the meanwhile, if you have not already done so, to give your close scrutiny to the program which it is proposed to inaugurate in the industry so that when the matter comes up for decision you may be able to give a ready answer and so that your organization may be in a better position to cooperate to the fullest practical extent with the movement when it is officially inaugurated.

## Changes to Natural Gas

**St. Louis** County Gas Co., Webster Groves, Mo., has altered the boilers of its Shrewsbury plant to burn natural gas for its gas manufacturing operations. The company serves mixed, natural and manufactured gas in its system which includes Webster Groves and other towns in St. Louis County.

## New Zealand Women Attend Gas Cookery Classes



"Down Below" housewives are just as much interested in modern cookery as elsewhere. Here is shown a group of enthusiastic business women who were formed into a class by The Christchurch Gas, Coal & Coke Company, Limited, Christchurch, New Zealand. Classes and demonstrations are held once a week. A regular course consists of six demonstrations, according to H. C. Ridley, sales manager of the company, and when one is finished another group is introduced into the series.

# Associations Affiliated with A. G. A.

## Canadian Gas Association

Pres.—Donald G. Munroe, Montreal Coke & Mfg. Co., Montreal, Que.  
Sec.-Tr.—G. W. Allen, 21 Astley Avenue, Toronto.

## Empire State Gas and Electric Association

Pres.—Alfred H. Schoellkopf, Niagara Hudson Power Corp., Buffalo, N. Y.  
Chairman, Gas Section—A. M. Beebe, Rochester Gas & Electric Corp., Rochester, N. Y.  
Sec.—C. H. B. Chapin, Grand Central Terminal, New York, N. Y.

## Illinois Public Utilities Association

Pres.—Bernard J. Mullaney, The Peoples Gas Light & Coke Company, Chicago, Ill.  
Sec.—J. R. Blackhall, Suite 1213, 79 West Monroe St., Chicago, Ill.

## Indiana Gas Association

Pres.—R. S. Brunner, Indiana Gas Utilities Co., Richmond, Ind.  
Sec.-Tr.—P. A. McLeod, New Castle, Ind.

## Michigan Gas Association

Pres.—Walter E. White, Commonwealth & Southern Corp., Jackson, Mich.  
Sec.-Tr.—A. G. Schroeder, Grand Rapids Gas Light Co., Grand Rapids, Mich.

## Maryland Utilities Association

Pres.—F. A. Mitchell, Eastern Shore Public Service Co., Salisbury, Md.  
Sec.—D. E. Kinnear, 803 Court Square Bldg., Baltimore, Md.

## Mid-West Gas Association

Pres.—R. L. Klar, Des Moines Gas Co., Des Moines, Iowa.  
Sec.-Tr.—Roy B. Searing, Sioux City Gas & Electric Co., Sioux City, Iowa.

## Missouri Association of Public Utilities

Pres.—Fred Karr, St. Joseph Gas Co., St. Joseph, Mo.  
Sec.-Tr.—N. R. Beagle, Missouri Power & Light Co., Jefferson City, Mo.  
Asst. Sec.—Jesse Blythe, 103 West High St., Jefferson City, Mo.

## New England Gas Association

Pres.—H. R. Sterrett, New Haven Gas Light Co., New Haven, Conn.  
Exec. Sec.—Clark Belden, 41 Mt. Vernon St., Boston, Mass.

Chairman, Operating Div.—P. R. Buchanan, Hartford Gas Co., Hartford, Conn.

Sec.-Tr., Operating Div.—D. R. Campbell, Portland Gas Light Co., Portland, Me.

Chairman, Sales Div.—H. B. Hall, Old Colony Gas Co., East Braintree, Mass.

Sec.-Tr., Sales Div.—R. J. Rutherford, Cambridge Gas Light Co., Cambridge, Mass.

Chairman, Industrial Div.—P. A. Nelles, Charles H. Tenney & Co., Boston, Mass.

Sec.-Tr., Industrial Div.—S. F. Morgan, New Bedford Gas & Edison Lt. Co., New Bedford, Mass.

Chairman, Accounting Div.—Leland Balch, Lowell Gas Light Co., Lowell, Mass.

Sec.-Tr., Accounting Div.—C. D. Perkins, Malden & Melrose Gas Light Co., Malden, Mass.

Chairman, Manufacturers Div.—C. H. Cummings, Industrial Appliance Co. of N. E., Boston, Mass.

Sec.-Tr., Manufacturers Div.—J. H. McPherson, James B. Clow & Sons, Boston, Mass.

## New Jersey Gas Association

Pres.—F. A. Lydecker, Public Service Electric and Gas Co., Newark, N. J.

Sec.-Tr.—G. B. Webber, Public Service Electric and Gas Co., Newark, N. J.

## Ohio Gas and Oil Men's Association

Pres.—L. K. Langdon, Union Gas & Electric Co., Cincinnati, Ohio.

Sec.-Tr.—Wm. H. Thompson, 811 First National Bank Bldg., Columbus, Ohio.

## Oklahoma Utilities Association

Pres.—R. J. Benz, Southwestern Bell Telephone Co., Oklahoma City, Okla.  
Mgr.—E. F. McKay, 1020 Petroleum Bldg., Oklahoma City, Okla.

## Pacific Coast Gas Association

Pres.—Geo. P. Egleston, H. R. Basford Co., San Francisco, Calif.  
Mang. Dir.—Clifford Johnstone, 447 Sutter St., San Francisco, Calif.

## Pennsylvania Gas Association

Pres.—F. M. Milward Oliver, The Philadelphia Gas Works Co., Philadelphia, Pa.  
Sec.—Frank W. Lesley, Pennsylvania Gas & Electric Co., York, Pa.

## Pennsylvania Natural Gas Men's Association

Pres.—F. F. Schauer, Equitable Gas Co., Pittsburgh, Pa.  
Sec.-Tr.—B. H. Smyers, Jr., 435 Sixth Ave., Pittsburgh, Pa.

## Southern Gas Association

Pres.—B. B. Ferguson, Portsmouth Gas Co., Portsmouth, Va.  
Sec.-Tr.—S. L. Drumm, New Orleans Public Service Inc., New Orleans, La.

## Southwestern Public Service Association

Pres.—Knox Lee, Southwestern Gas & Electric Co., Marshall, Texas.  
Sec.—E. N. Willis, 1801 No. Lamar St., Dallas, Texas.

## The Public Utilities Association of Virginia

Pres.—T. Justin Moore, Va. Elec. & Power Co., Richmond, Va.

## Wisconsin Utilities Association

Pres.—R. G. Walter, Wisconsin Power & Light Co., Madison, Wis.  
Exec. Sec.—J. N. Cadby, 135 West Wells St., Milwaukee, Wis.

**Sixteenth Annual Convention  
of the American Gas Association**

**Atlantic City, N. J.**

♦ Week of

**October 29, 1934**

# Personnel Service

## SERVICES OFFERED

**Manager, natural gas, manufactured gas and electricity.** Excellent record in developing rundown properties and obtaining new business. Can reduce expenses and make money. 759.

**Position wanted with appliance manufacturer.** Experience includes executive training, and covers over fourteen years in the sale of tin gas meters. Offers character, integrity and ability with service. Thoroughly conversant with management problems. Would prefer position in the East. 761.

**As sales manager or manufacturer's representative** by engineering graduate with more than eighteen years' experience in sales and merchandising with natural gas, manufactured gas and electric utilities and in various operating and executive activities. Last few years work includes unusually broad worthwhile national contacts with gas companies in many states. 762.

**Gas analyst.** Thoroughly experienced in all phases of analyses of natural gas, producer gas, flue gas and special gas mixtures. Also coal, coke, tar analyses. Well trained for gas producer laboratory. 763.

**All around gas man** (31), married, graduate chemical engineer. Experienced in design, construction and operation of water gas plants and high and low pressure distribution systems. Good business experience and judgment. Interested in engineering, operation, construction, sales or management. Location not important. Available immediately. 764.

**Trained young experienced aggressive leader** desires position in domestic gas sales. Has been very successful as complete dealer appliance Sales Manager and later led the New York City market for some years in sales for a well-known range organization. Can handle industrial work. 765.

**NRA will boost your operating costs.** I can boost gas-using appliance sales by enlisting interest and cooperation of plumbers and dealers. I know how, because of 6½ years of well-attested success in working with these men along closely similar lines. Salary ideas not cheap, but attuned to 1933. 766.

**Sales executive available.** Thirteen years' experience as commercial and sales manager. Gas and electric operations in small towns and large cities. Natural gas conversion experience. Organized and trained sales personnel in domestic, commercial, house heating and industrial fields. 768.

**Gas Engineer.** Technical training chemical engineering and gas and fuel engineering. Experience covers gasoline plant construction, natural gas plant construction and operation, preparation of cost accounting, depreciation studies, original cost valuation studies and Public Service Commission relations. Now available, will connect anywhere to prove ability and secure permanent position. Married. 770.

**Sales manager—engineer.** University graduate. Good general business background. Thirteen years' experience heating, ventilating, air conditioning. Industrial and residential work. Capable making own drawings, layouts, estimates, assume complete responsibility installations, credits, collections. Acquainted, architects, engineers, contractors, builders, industrial plants. Handle men successfully and remember how to sell myself. 771.

**Manager—Chief Accountant.** Twelve years' experience assistant secretary and treasurer; three years' manager carburetted water gas property; excellent record in public relations; thoroughly experienced in new business work; budgets; cost analyses; auditing; will consider either domestic or foreign assignment. 773.

**Gas man with twenty odd years' extensive experience is available for duty most anywhere; operation, distribution, construction or new business.** 774.

## SERVICES OFFERED

**Graduate Engineer** (47) soundly trained as gas company cadet followed by wide combination gas and electric company experience, up through engineering branches to division manager large organization. Has national viewpoint, could be very useful in holding company or assistant to busy executive. Can create and maintain good public relations. 778.

**Engineer.** Have had general experience in engineering and sales in the cutting and welding industry over a period of fifteen years. About six years engineer Works Office and construction department. Three years marine work and three years in steel works. 779.

**Draftsman, detailer and tracer.** Electrical and mechanical apparatus. Concrete subways and ducts also shop and field experience. (Age 33.) 780.

**Natural gas engineer** (35), married. Twelve years' experience in industry as valuation, construction and heating engineer. Thoroughly familiar with rate making problems, modern pipe line construction and sales promotion work for heating sales. 781.

**Advertising man—gas company, department store, advertising agency experience.** Creator of prize winning campaign. Copy, layout, merchandising man, understanding all phases of printing production, sales promotion. Married; will go anywhere. Samples on request. 782.

**Eighteen years' experience in domestic gas sales and house heating.** Capable of taking charge of sales force or would be interested in agency for gas appliance for New York and New Jersey. Have good connection with plumbers, jobbers and public utility. 783.

**Advertising, publicity, sales promotion manager;** several years' successful experience as department head for large, progressive gas and electric organization; also wide experience in newspaper and magazine field. Thoroughly trained and competent in all details of practical advertising and promotional work (direct mail, etc.) and familiar with best modern public utility practice. 784.

**University graduate mechanical engineer with vision, initiative, imagination, creative ability and common sense; broad experience in management, sales, markets, contracts and negotiating; engineering plants, equipment, inventions and patents; business cycles, business indexes and economics; and in assembling, arranging and interpreting statistics, data and conditions.** 785.

**Graduate, June 1933, chemical engineering school, Purdue University, majored in gas engineering, desires connection with a utility company as gas engineer in operating or house heating departments or with a reliable gas appliance manufacturer. Age 23, white, single, native American. Will locate anywhere in United States. Available immediately.** 786.

**Services of a thoroughly experienced purchasing agent available immediately.** Excellent record. Trained in engineering and utility organizations and for fourteen years purchasing executive of efficiently organized corporation. 787.

**Auditor-accountant.** Wishes placement in auditing department to assist auditor or chief accountant on corporate and operating accounts, monthly reports, etc., would consider place on field audit staff if desired. Has had extensive experience in utility accounting as traveling auditor with one of foremost supervisory and management organizations in the country. 788.

**Heating engineer.** Versed in all phases of air-conditioning, conversion burners and direct-fired heating equipment as applied to the use of natural or manufactured gas. Capable of designing, selling and overseeing erection of such heating plants, can take charge of house heating department and show results. Salary and location optional. 789.

## SERVICES OFFERED

**Editor and writer,** formerly with nationally known organizations expert in collecting, writing, and editing business material. Can do research and write articles, booklets, etc., from source data. Skilled also in rewrite work and in editing of manuscripts and proofs. 790.

**Appraisal engineer** (42), American, ten years' experience with a large utility company on gas and electric valuations. Thoroughly familiar with public service commission classified system of accounts. Field inventories, unit costs and pricing practice. Technical training. 791.

**Manager-gas engineer.** (46), married. Technical education. Twenty years' experience in construction, engineering, manufacture, distribution, finance, management, sales and public relations. Wide experience. Build up property or develop sales per year per customer. Small or large property. Modest compensation. 792.

**Accountant—twenty-two years' utilities experience.** Specialty is installation and reorganization (47). 793.

**Gas range specialist,** with broad experience. For past two years intimately associated with design and development of new models; ideas for new sales features, new sales plans for dealers, new outlets for business. Has proven sales, advertising and promotional ability together with contacts that will be helpful in securing business. 794.

**Engineer,** nine years' broad experience in public utility work, both gas and electric, covering management, valuation, gas analysis, construction estimates, operating improvements, marketing studies, rates, etc. Married. 795.

**Draftsman,** twenty years' mechanical experience, machine shop, machine design, drafting general mechanical work, electrical engineering work and some field and industrial experience (40). American. Metropolitan area. 796.

**Services of experienced appliance salesman** both through utilities and dealers, domestic and heavy duty, are offered. Wide acquaintance in the gas industry. Desire Eastern territory. Twenty-three years in the industry; fourteen years last position. Clean and successful sales record (38). Married. 797.

**Gas engineer, B.S. and M.S. in gas engineering,** Purdue University. Three years' experience in utility work. Desire position in engineering, operating or sales (25). Married. Will go anywhere. 798.

## POSITIONS OPEN

**Manager** with coal and water gas experience; details should be given in first letter of qualifications including education, training, and experience, if any, with natural gas. Location middle West. 0261.

### AN APPEAL

A healthy interest continues on the part of prospective employers in some of the advertisements placed by applicants in our *Services Offered* column. We bespeak the interest and assistance of gas companies, manufacturers of equipment and appliances and all those in need of additional personnel in placing advertisements in the *Positions Open* column.

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# AMERICAN GAS ASSOCIATION, INC.

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